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Energy Consumption - March 1975

Nuclear Power -- April 1975 The Price of Crude Oil - June 1975 U.S. Coal Resources and Reserves -- July 1975 Propane, A National Energy Resource - Septem-

ber 1975

Short-Term Energy Supply and Demand Forecasting at FEA - October 1975

This Administrator has determined that the publication of this periodical is necessary in the transaction of public business required by law of this Agency. Use of funds for printing this periodical have been approved by the Director of the Office of Management and Budget through June 30, 1976.

Overview

Domestic energy production in October totaled 5.14 quadrillion Btu (or 166 trillion Btu per day), approximately equal to daily production in September. Coal output increased substantially (6 percent on a daily basis) for the second month in a row. Daily production of natural gas was also projected to rise (by 1 percent). Together, these two fuels were the source of 62 percent of total domestic energy output in October. Crude oil, which accounted for 30 percent of the total, was the only major energy source to show a decline in production (2 percent) during the month. In fact, average crude oil output for the period August through October was lower than for any 3-month period since early 1967. Nuclear and hydroelectric power contributed the remaining 8 percent of total energy production in October. Cumulative energy production during the first 10 months of 1975 was 3 percent below the total for the same period in 1974 and almost 4 percent below the same months in 1973.

Not only was there a decrease in energy production in 1975, but the United States also consumed less energy. During the period January through September, domestic consumption of energy was down 2 percent from the level for the same period in 1974. This compares with a 4.3-percent average annual increase in energy demand for the 10-year period prior to 1974. However, since the Arab oil embargo during the last quarter of 1973 and first quarter of 1974 and the slowdown in economic activity, domestic energy consumption has been declining. Last year consumption was more than 2 percent below the level for 1973.

Even though demand for energy was lower than during 1974 because of declining domestic production, in the first 10 months of 1975 it was necessary to import fossil fuels at the same rate as last year. Compared with the corresponding months in 1973, however, imports have been reduced more than 4 percent. A significant change has occurred in the mix of fuels imported since 1973. The portion accounted for by crude oil has grown from 48 percent of the total to 62 percent, while the contribution from refined products dropped from 45 percent to 31 percent. The relative share of natural gas imported remained unchanged at 7 percent of the total.

Inventories of crude oil at the end of October appeared adequate for the start of the winter heating season, assuming no supply dislocations or excessively cold weather. Primary crude stocks, of 259 million barrels, were well over the 240-million-barrel level which the National Petroleum Council considers to be the "minimum operating inventory" (MOI). Fuel oil inventories were also at seasonally high levels. Distillate stocks, at 229 million barrels, were almost 20 million barrels above

winter MOI, while residual stocks, of 81 million barrels, were more than 30 million barrels over MOI.

In October, the weather across most of the country was considerably warmer than normal. As a result, the continental United States accumulated 10 percent fewer distillate oil heating degree-days than normal, and almost 30 percent less than the number for last October. Most significantly, the eastern third of the Nation, which depends heavily on distillate oil as a heating fuel, had only half as many oil heating degree-days as in October 1974. (Degree-day information will be published as a regular monthly feature during the heating season, October through April.)

Production of electricity by utilities, which peaks during the summer months, declined seasonally in October to a level 1 percent below that for September. Cumulative production for the first 10 months of 1975 remained about 2 percent above the level for a year ago.

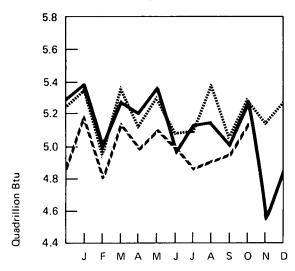
In October, the national average retail price of regular gasoline declined for the first time since November 1974. The October price of 58.9 cents per gallon reflected a 0.4-cent drop from September. The price paid by retailers for gasoline declined an equal amount, leaving the dealer margin unchanged. Residential heating oil prices, in contrast, advanced 0.9 cent during the month to 39.3 cents per gallon. Last October residential customers paid 35.6 cents per gallon for heating oil.

Prices for "new" domestic crude oil continued to rise, reaching \$12.46 per barrel in September, up 8 cents from the price during the previous month. The price refiners paid for domestic crude also rose, but only by 1 cent, while the price they paid for imported oil declined 21 cents.

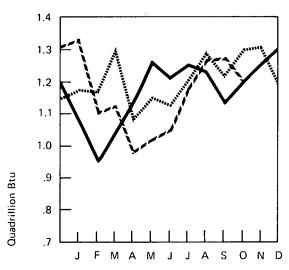
Although there was a decline during October in the number of seismic crews exploring for new reserves of oil and gas, drilling activity for hydrocarbons continued at a 14-year record high. The number of rotary drilling rigs in operation was greater than for any month since January 1962, and the number of wells completed during the month was up 24 percent from the number completed during October 1974 and up 57 percent from the same month in 1973.

Internationally, world crude oil production in September reached a new high of just under 57 million barrels per day. Arab OPEC countries increased production by 740,000 barrels per day for a total of 18.45 million per day, bringing down the amount of production shut in by these countries to slightly below 25 percent.

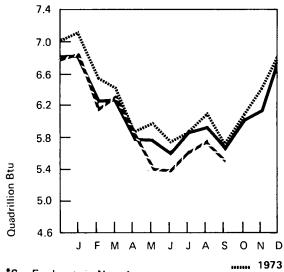
Domestic Production of Energy*



Imports of Fossil Fuels



Domestic Consumption of Energy**



1973 1974 1975

^{**}See Explanatory Note 2.

CRUDE OIL

Crude oil production fell to 8,231,000 barrels per day in October, after a significant increase in September. This was a resumption of the general declining trend. During the period August through October, production averaged 8,296,000 barrels per day, the lowest 3-month average since early 1967.

Because inventories of most major products had been at sufficiently high levels at the beginning of the heating season, crude oil input to refineries in October fell to 12,447,000 barrels per day, following a 3-month average of just over 13 million barrels per day.

Crude oil imports fell to 4.4 million barrels per day after several months of especially high receipts.

Crude inventories rose for the second month after falling for 4 consecutive months from a near record high in April. Stocks at the end of October totaled 259,273,000 barrels, adequate for the coming heating season barring any supply dislocations.

TOTAL REFINED PETROLEUM PRODUCTS

Domestic demand for refined petroleum products in October averaged 15,865,000 barrels per day, only 67,000 barrels per day over that of September. This compares with increases ranging from about 200,000 to 1 million barrels per day during the same period in the previous 3 years.

A considerable portion of October demand represented a seasonal build-up of secondary and consumer inventories of distillate fuel oil. Demand for this product increased a substantial 694,000 barrels per day during October. Offsetting most of this increase, however, was a seasonal decline in motor gasoline demand and a contraseasonal decline in residual fuel oil demand. Much of the 336,000-barrel-per-day decline in residual demand reflected reduced industrial activity, warmer than normal weather, relatively high secondary and consumer inventories, and fuel conversion and switching programs.

DISTILLATE OIL HEATING DEGREE-DAYS

During October 1975, the continental United States accumulated 29.2 percent less distillate oil heating degree-days than during

October 1974, and 9.7 percent less than normal (1941-1970 average), indicating above normal temperatures.

Since July 1, 1975, oil heating degree-days for the entire country have been near normal. Compared with the same period a year ago, however, the western third of the Nation has accumulated more degree-days, reflecting colder weather, while the rest of the country has had fewer oil heating degree-days (warmer). A significant 39.5-percent decline in degree-days has occurred in PAD I (the eastern third of the country).

NATURAL GAS

Marketed production of natural gas in October was estimated to be 6.1 percent below the volume for October 1974. During the first 10 months of 1975, marketed production totaled 16,733 billion cubic feet, 7.5 percent below the 18,083 billion cubic feet marketed during the same period of 1974.

Imports of natural gas in October are estimated at 82 billion cubic feet, 1.2 percent below the October 1974 level. Imports during the first 10 months of the year totaled 789 billion cubic feet, a figure approximately equal to the volume imported during the same period in 1974.

COAL

Production of bituminous coal and lignite in October 1975, totaling 61.0 million tons, increased by more than 16 percent over the current 1975 monthly average.

Coal exports during the first 9 months of 1975 were 13 percent greater than exports in the corresponding period of 1974.

On November 12, 1975, the House Interior Committee failed by one vote to revive a twice-vetoed surface mining regulatory measure. This proposed House legislation would have attached a strip mining bill onto one providing for the modernization of procedures for leasing Federal lands for coal production. Currently, the only strip mining legislation pending is contained in the Federal Coal Leasing Act of 1975 (passed by the Senate on July 31, 1975), which includes provisions to regulate strip mining on Federal lands.

Part 2

Energy Sources

Crude Oil

		Crude Inpu Refineries	it to	Domestic Production		Imports		Stocks*	
			In tho	usands of b	arrels per da	зу		In thousan of barrels	ds
		BOM	FEA	BOM	FEA	вом	FEA	BOM	FEA
1972	January February March April May June July August September October November December AVG.	11,388 11,356 11,345 11,184 11,478 11,841 11,885 11,915 12,112 11,871 11,851 12,113 11,696		9,114 9,336 9,462 9,513 9,614 9,522 9,496 9,483 9,508 9,482 9,426 9,335 9,441		2,046 2,081 2,067 2,004 2,160 2,085 2,182 2,112 2,364 2,516 2,299 2,667 2,216		236,776 238,882 244,860 253,492 265,305 257,601 251,913 244,333 237,085 239,949 237,519 232,803	
1973	January February March April May June July August September October November December AVG.	12,190 12,187 12,201 12,208 12,281 12,862 12,750 12,635 12,560 12,758 12,374 12,150 12,431		9,176 9,395 9,272 9,292 9,262 9,214 9,217 9,169 9,065 9,224 9,161 9,063 9,208		2,732 2,873 3,162 3,049 3,215 3,220 3,501 3,593 3,471 3,739 3,452 2,891 3,244		224,056 221,893 230,696 235,383 244,777 235,846 230,750 235,660 228,280 233,520 237,001 229,504	
1974	January February March April May June July August September October November December AVG.	11,491 11,102 11,355 11,823 12,333 12,697 12,811 12,644 12,124 12,286 12,332 12,519 12,689	12,777 12,709 12,905 12,731 12,253 12,430 12,402 12,671	8,907 9,156 8,950 8,952 8,903 8,777 8,754 8,682 8,432 8,616 8,569 8,514 8,765	8,698 8,717 8,622 8,651 8,458 8,471	2,382 2,248 2,462 3,267 3,908 3,925 4,091 3,924 3,797 3,810 3,958 3,869 3,477	3,748 3,957 4,167 3,852 3,758 3,936 3,997 3,979	220,261 228,004 231,705 243,687 256,726 255,762 255,936 251,905 253,623 256,430 258,123 252,158	252,270 253,008 252,399 247,040 249,476 255,003 256,271 248,808
1975	January February March April May June July August September October AVG*** (10 months)	12,3	12,442 12,144 11,961 11,837 11,985 12,421 13,002 13,120 R12,939 **12,447	8,439 8,575 8,476 8,440 8,371 8,409 8,327	8,644 8,488 8,333 8,567 8,464 8,304 8,304 8,261 R8,400 **8,231	4,029 3,828 3,656 3,378 3,486 3,905 4,193	3,964 4,061 3,853 3,416 3,493 3,907 4,337 4,661 R4,664 **4,415	258,163 264,348 267,564 269,294 263,336 262,873 252,035	253,836 264,833 271,410 275,393 274,123 268,564 256,965 250,354 R253,597 **259,273

Sources: BOM and FEA as indicated.

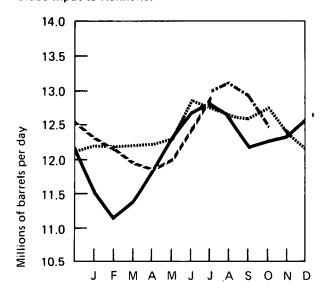
^{*}See definitions.

**Preliminary data.

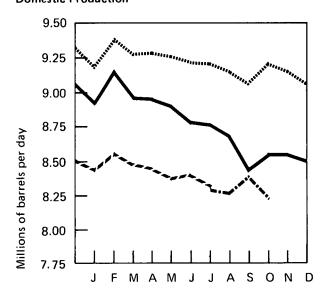
***10-month average is based on Bureau of Mines (BOM) data for January through July and Federal Energy Administration (FEA) data for August through October.

R=Revised data.

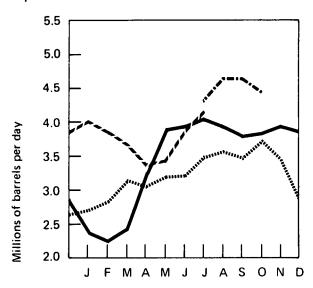
Crude Input to Refineries*



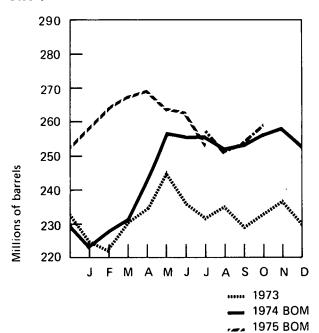
Domestic Production*



Imports*



Stocks*



*See Explanatory Note 3.

1975 FEA

Total Refined Petroleum Products

		Domestic Demand		Imports*	
		In t	housands of	f barrels per day	
		вом	FEA	BOM	FEA
1972	January February March April May June July August September October November December AVG.	16,735 17,861 16,870 15,529 14,801 15,615 14,821 15,936 15,489 16,455 17,610 18,738 16,367		2,721 2,764 2,730 2,298 2,208 2,382 2,215 2,344 2,342 2,607 2,653 3,039 2,525	8
1973	January February March April May June July August September October November December AVG.	18,713 19,094 17,216 15,921 16,626 16,481 16,372 17,499 16,656 17,202 18,492 17,538 17,308		3,125 3,635 3,448 2,545 2,626 2,670 2,678 2,999 2,941 2,894 3,470 3,164 3,012	
1974	January February March April May June July August September October November December AVG.	17,270 17,371 16,045 15,919 15,720 16,176 16,301 16,546 15,994 17,025 17,214 17,997 16,629	15,740 16,191 15,853 15,803 16,318 17,121 17,129 17,588	2,973 2,973 2,753 2,703 2,580 2,493 2,397 2,434 2,225 2,340 2,704 2,781 2,611	2,454 2,218 2,140 2,281 2,180 2,361 2,581 2,638
1975	January February March April May June July August September October AVG.*** (10 months)	17,983 17,248 16,316 16,041 15,118 15,611 15,762	18,112 17,370 16,567 16,105 15,306 15,688 15,880 16,241 R15,798 **15,865	2,811 2,348 2,074 1,655 1,690 1,502 1,789	2,484 2,138 1,920 1,810 1,776 1,602 1,875 1,870 32,144 1,711 7

R=Revised data.

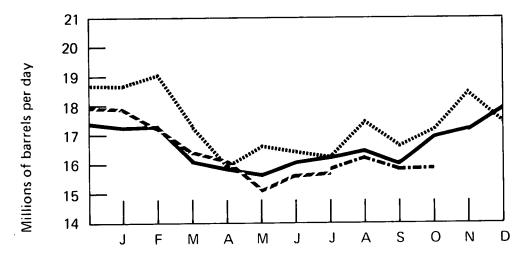
Sources: BOM and FEA as indicated.

^{*}See definitions.

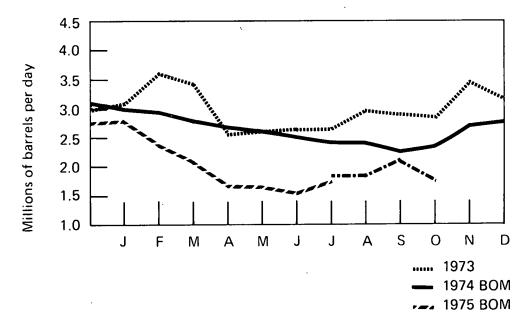
**Preliminary data.

****10-month average is based on Bureau of Mines (BOM) data for January through July and Federal Energy Adminis-









*See Explanatory Note 3.

1975 FEA

Motor Gasoline

		Domestic Demand		Production	on*	Imports		Stocks*	
				In thousands	of barrels p	er day		In thousar of barrels	ıds
		вом	FEA	вом	FEA	вом	FEA	вом	FEA
1972	January February March April May June July August September October November December AVG.	5,548 5,710 6,412 6,283 6,445 6,822 6,673 6,938 6,453 6,453 6,459 6,378 6,376		6,151 5,989 5,913 5,833 6,023 6,244 6,612 6,588 6,605 6,532 6,436 6,424 6,281		51 66 67 52 74 75 69 81 69 71 69 69		239,633 249,927 236,831 225,153 214,736 200,710 192,706 199,690 207,776 208,930 212,770	
1973	January February March April May June July August September October November December AVG.	6,118 6,437 6,513 6,541 6,907 6,964 7,023 7,257 6,581 6,677 6,823 6,237 6,674		6,341 6,855 6,150 6,377 6,714 6,993 6,986 6,880 6,619 6,621 6,375 6,099 6,527		59 95 71 63 101 174 133 164 127 194 216 202 134		221,823 216,367 207,581 204,708 202,081 208,374 211,488 205,122 210,278 214,525 207,343 209,395	
	January February March April May June July August September October November December AVG.	5,804 6,100 6,162 6,457 6,745 6,919 6,959 7,061 6,388 6,712 6,547 6,558 6,537	6,406 6,895 6,941 6,849 6,652 6,542 6,659 6,551	5,900 5,969 5,982 6,311 6,328 6,663 6,792 6,815 6,453 6,336 6,292 6,419 6,358	6,301 6,642 6,835 6,776 6,485 6,340 6,257 6,451	163 184 225 260 250 211 212 253 202 171 174 141 204	228 145 122 192 140 175 264 170	217,463 219,058 220,307 223,752 218,670 217,381 218,838 218,951 227,031 220,748 218,385 224,719	229,878 226,652 227,195 231,015 230,181 229,275 225,226 227,363
1975	January February March April May June July August September October AVG.*** (10 months)	* 6,6	6,228 6,205 6,408 6,574 6,855 6,951 6,957 7,103 R6,740 *6,566 78	6,509 6,276 6,070 6,046 6,126 6,669 7,003	6,574 6,279 6,068 5,997 6,063 6,622 6,992 6,843 R6,782 **6,353	262 171 150 133 142 177 209	203 168 146 127 135 156 167 275 R246 **177 94	242,285 251,915 248,685 232,556 213,947 207,114 212,454	244,425 251,189 245,181 231,542 211,183 205,713 211,942 212,370 R221,020 **219,909

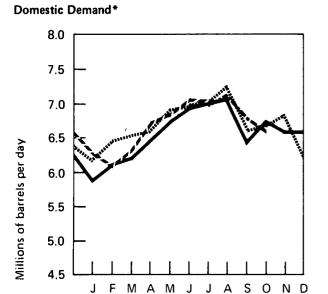
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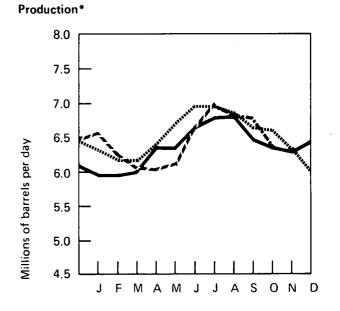
Sources: BOM and FEA as indicated.

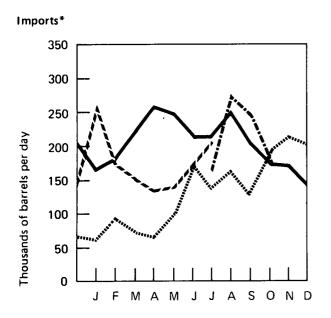
^{*}See definitions.

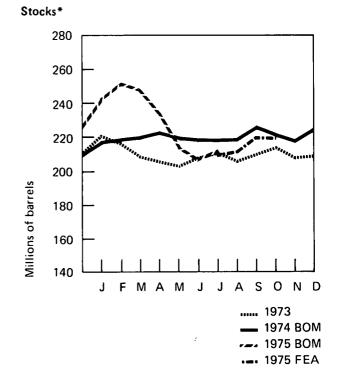
**Preliminary data.

***10-month average is based on Bureau of Mines (BOM) data for January through July and Federal Energy Adminis-









^{*}See Explanatory Note 3.

Jet Fuel

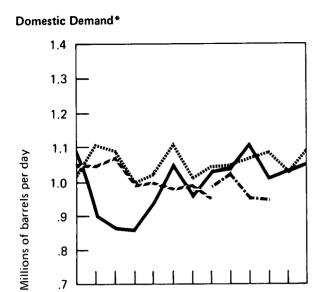
1		Domestic Demand	;	Producti	on	Imports		Stocks	
								In thousar	nds
				In thousands	housands of barrels per day			of barrels	
		BOM	FEA	BOM	FEA	BOM	FEA	BOM	FEA
1972	January February March April May June July August September October November December AVG.	1,021 1,141 1,008 986 999 1,163 1,000 946 1,035 1,171 1,050 1,030 1,045		784 900 906 877 887 859 873 837 810 822 800 811		179 220 167 124 159 292 165 181 190 286 184 189		25,857 25,230 27,147 27,568 28,885 28,356 29,429 31,649 30,597 28,633 26,650 25,493	
1973	January February March April May June July August September October November December AVG.	1,110 1,090 994 1,015 1,112 1,007 1,046 1,049 1,070 1,104 1,025 1,087 1,059		864 898 917 887 840 836 825 844 847 875 852 830 859		231 221 152 145 211 164 232 180 235 246 275 259 212		24,814 25,437 27,585 27,881 25,825 25,447 25,661 24,851 25,149 25,577 28,539 28,544	
1974	January February March April May June July August September October November December AVG.	895 860 956 941 1,053 952 1,028 1,031 1,109 1,011 1,032 1,043 993	915 1,016 1,032 1,076 1,100 1,092 1,055 1,138	800 783 832 868 868 810 802 805 867 868 863 861	873 886 813 849 883 905 861 908	136 75 139 132 205 141 214 206 217 161 140 178 163	97 115 188 202 183 216 222 219	29,732 29,617 29,996 31,725 32,324 32,200 31,671 30,989 30,186 30,564 29,616 29,776	33,574 33,128 32,231 31,594 30,587 31,488 31,303 30,957
1975	January February March April May June July August September October AVG.** (10 month	_	1,001 1,032 1,018 1,034 996 996 984 1,032 R950 **940	831 835 896 864 861 839 883	847 849 892 863 857 837 880 955 R901 **813	229 200 130 138 133 106 88	164 167 136 212 124 112 106 108 116 *65	30,321 29,133 30,456 30,263 30,719 29,337 29,798	31,221 30,641 30,906 32,083 31,587 30,122 30,167 31,105 R33,053 *31,086

Sources: BOM and FEA as indicated.

^{*}Preliminary data.

**10-month average is based on Bureau of Mines (BOM) data for January through July and Federal Energy Administration (FEA) data for August through October.

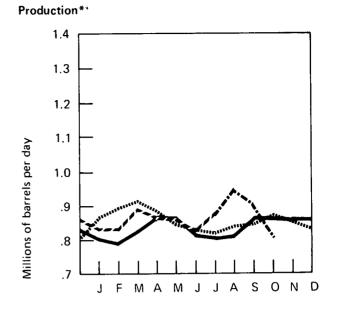
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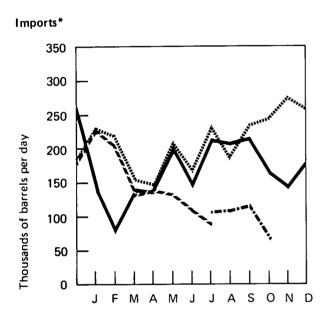


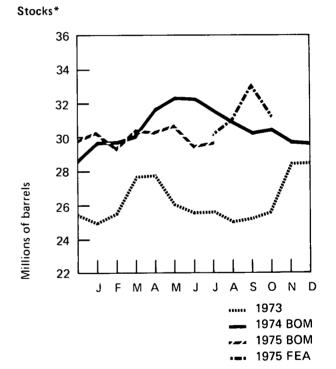
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*See Explanatory Note 3.

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Distillate Fuel Oil

		Domestic Demand	;	Producti	on*	Import	:s	Stocks*	
				In thousands	of barrels pe	er day		In thousar of barrels	nds
		BOM	FEA	ВОМ	FEA	BOM	FEA	вом	FEA
1972	January February March April May June July August September October November December AVG.	3,723 4,164 3,482 2,778 2,250 2,194 1,765 2,064 2,205 2,759 3,383 4,232 2,913		2,538 2,653 2,564 2,476 2,585 2,623 2,529 2,582 2,624 2,722 2,719 2,938 2,630		197 204 257 189 132 96 97 92 99 203 227 382 182		160,027 122,154 101,728 98,288 112,892 128,739 155,557 174,674 190,250 195,530 182,581 154,284	
1973	January February March April May June July August September October November December AVG.	4,138 4,302 3,337 2,635 2,673 2,419 2,328 2,555 2,675 2,930 3,508 3,690 3,092		3,028 2,937 2,667 2,510 2,544 2,825 2,752 2,801 2,813 2,911 2,922 3,136 2,820		364 731 602 240 268 222 318 288 313 451 492 439 392		130,958 113,276 111,270 114,698 119,104 137,844 160,869 177,271 190,171 202,965 200,182 196,421	
	January February March April May June July August September October November December AVG.	3,820 3,835 3,145 2,848 2,453 2,386 2,302 2,295 2,377 2,863 3,145 3,855 2,939	2,616 2,249 2,251 2,271 2,473 2,816 3,058 3,923	2,880 2,399 2,226 2,522 2,704 2,783 2,792 2,704 2,551 2,770 2,801 2,924 2,668	2,741 2,818 2,881 2,779 2,655 2,787 2,883 3,028	449 293 267 216 271 228 214 111 144 213 443 517 281	288 175 168 112 143 264 403 466	181,179 149,125 128,822 125,553 141,806 160,645 182,458 198,673 208,269 209,908 212,875 223,717	151,345 173,639 198,374 217,632 227,069 234,257 241,125 227,877
1975	January February March April May June July August September October AVG.*** (10 months)	2,8°	4,055 4,004 3,460 3,103 2,435 2,272 2,147 2,237 R2,184 **2,878	2,852 2,679 2,531 2,486 2,431 2,574 2,589	2,954 2,707 2,614 2,532 2,496 2,639 2,659 2,650 R2,844 **2,774	324 302 256 110 136 68 106	350 295 217 131 144 74 124 91 111 **106	199,715 176,696 161,111 146,214 152,027 163,306 181,514	204,576 176,530 156,980 143,714 150,068 163,252 182,975 198,539 R221,659 **229,294

R=Revised data.

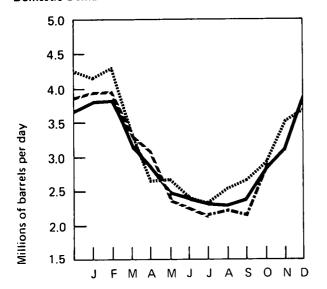
Sources: BOM and FEA as indicated.

^{*}See definitions.

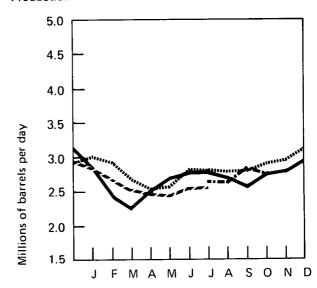
**Preliminary data.

***10-month average is based on Bureau of Mines (BOM) data for January through July and Federal Energy Administration (FEA) data for August through October.

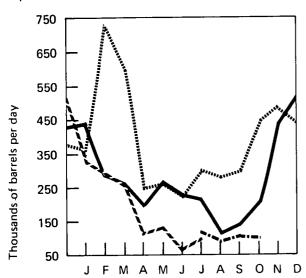
Domestic Demand*



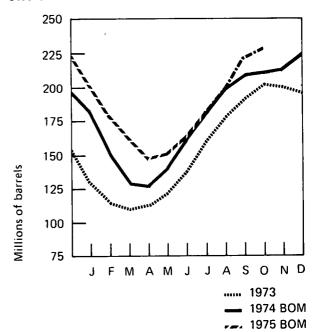
Production*



Imports*



Stocks*



*See Explanatory Note 3.

15

1975 FEA

Oil Heating Degree-Days

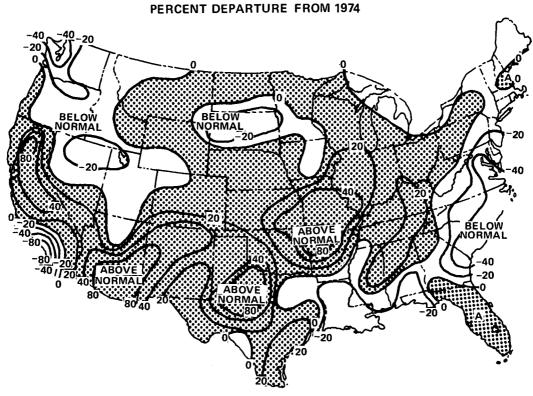
OIL HEATING DEGREE-DAYS*

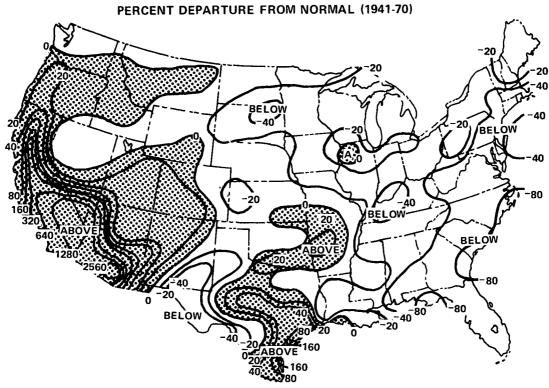
Petroleum Administration	oc	TOBER (Septem	ber 28 - October 26)	Cumulative Since July 1, 1975		
for Defense (PAD) Districts	1975	1974**	Normal (1941-1970)**	1975	1974**	Normal (1941-1970)**
PAD District I New England Conn., Maine, Mass., N.H., R.I., Vt.	155.4 322.7	314.8 (-50.6) 523.1 (-38.3)	196.1 (-20.8) 354.3 (- 8.9)	239.0 536.5	394.8 (-39.5) 710.0 (-24.4)	254.6 (- 6.1) 530.7 (1.1)
Middle Atlantic Del., Md., N.J., N.Y., Pa.	132.3	316.4 (-58.2)	194.8 (-32.1)	197.1	378.6 (-47.9)	229.9 (-14.2)
Lower Atlantic Fla., Ga., N.C., S.C., Va., W. Va.	80.5	188.8 (–57.4)	103.1 (-22.0)	106.5	224.2 (-52.5)	116.4 (- 8.5)
PAD District II III., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, Okla., S. Dak., Tenn., Wis.	260.2	341.1 (-23.7)	274.9 (- 5.4)	410.6	504.7 (-18.6)	380.2 (8.0)
PAD District III Ala., Ark., La., Miss., N. Mex., Tex.	75.3	99.0 (-24.0)	80.0 (- 5.9)	108.2	116.6 (- 7.2)	81.8 (32.3)
PAD District IV Colo., Idaho, Mont., Utah, Wyo.	338.4	308.6 (9.7)	351.4 (- 3.7)	443.4	412.4 (7.5)	484.3 (- 8.5)
PAD District V Ariz., Calif., Nev., Oreg., Wash.	77.8	52.5 (48.2)	73.3 (6.1)	118.7	89.2 (33.0)	129.5 (- 8.4)
U.S. TOTAL	231.2	326.4 (-29.2)	255.9 (- 9.7)	349.5	446.8 (-21.8)	349.3 (0.1)

^{*}See Explanatory Note 4 for explanation of oil heating degree-days.
**Percentage change in parentheses.

HEATING DEGREE-DAYS ACCUMULATED FROM JULY 1, 1975

OCTOBER 26, 1975





NOTE: Above normal heating degree-days correspond to below normal temperatures.

Source: Department of Commerce-NOAA.

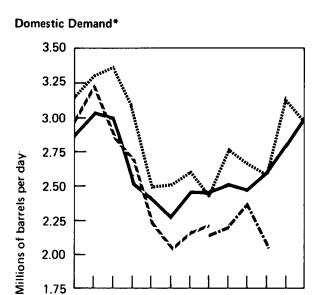
Residual Fuel Oil

		Domestic Demand	; ;	Producti	on	Imports		Stocks*	
				In thousand	ls of barrels	per day		In thousa of barrels	nds
		вом	FEA	ВОМ	FEA	BOM	FEA	ВОМ	FEA
1972	January February March April May June July August September October November December AVG.	2,815 3,171 2,682 2,444 2,111 2,196 2,107 2,257 2,239 2,362 2,843 3,151 2,529		924 963 828 739 664 661 673 674 710 745 890 1,124 799		1,892 1,923 1,926 1,676 1,573 1,648 1,594 1,653 1,625 1,655 1,769 1,968 1,742		59,440 50,891 51,566 49,425 53,035 56,109 60,230 61,399 63,692 63,758 57,702 55,216	
1973	January February March April May June July August September October November December AVG.	3,306 3,382 3,084 2,477 2,521 2,607 2,412 2,755 2,676 2,590 3,158 2,944 2,822		1,112 1,038 955 877 948 915 882 851 878 984 1,061 1,158		2,019 2,147 2,196 1,705 1,668 1,761 1,597 1,913 1,849 1,597 1,979 1,826 1,853		49,154 43,058 44,711 47,044 49,207 51,811 53,363 53,586 55,091 54,964 51,985 53,480	
	January February March April May June July August September October November December AVG.	3,035 3,010 2,516 2,432 2,251 2,455 2,432 2,539 2,454 2,610 2,819 2,965 2,624	2,111 2,177 2,135 2,368 2,419 2,501 2,631 2,881	1,072 1,029 912 984 995 1,026 1,056 1,067 1,032 1,099 1,229 1,335 1,070	992 1,058 1,091 1,126 1,070 1,112 1,226 1,350	1,732 1,923 1,674 1,587 1,353 1,549 1,433 1,530 1,400 1,464 1,636 1,612 1,572	1,250 1,260 1,197 1,342 1,274 1,369 1,453 1,561	46,548 45,004 47,222 51,339 54,356 57,891 59,787 60,988 60,251 58,679 60,363 74,939	64,548 68,646 73,066 76,011 72,723 72,090 73,581 74,521
1975	January February March April May June July August September October AVG.*** (10 months)	3,242 2,849 2,668 2,225 2,049 2,179 2,239	3,103 2,723 2,589 2,184 1,909 2,201 2,141 2,217 R2,388 *2,052	1,415 1,354 1,299 1,245 1,151 1,152 1,155	1,399 1,304 1,244 1,204 1,113 1,118 1,160 1,151 R1,178 *1,137	1,647 1,402 1,292 1,047 1,123 904 1,144	1,529 1,308 1,252 1,069 1,068 953 1,110 1,044 1,319 *1,168	60,233 66,495 64,148 66,340 73,498 69,660 71,526	68,628 65,061 61,891 64,121 72,088 67,641 71,358 70,489 R73,471 *80,673

R=Revised data.

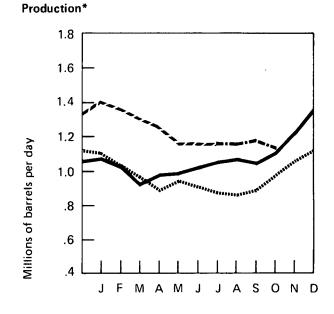
Sources: BOM and FEA as indicated.

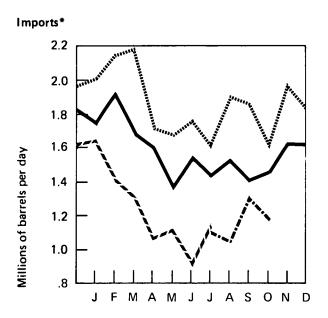
^{*}Preliminary data.
**10-month average is based on Bureau of Mines (BOM) data for January through July and Federal Energy Administration (FEA) data for August through October.

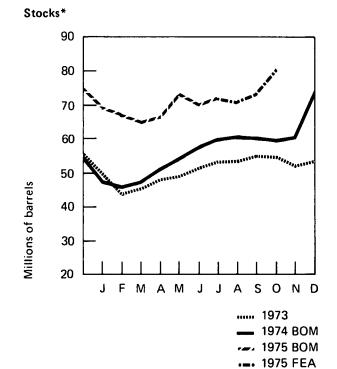


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^{*}See Explanatory Note 3.

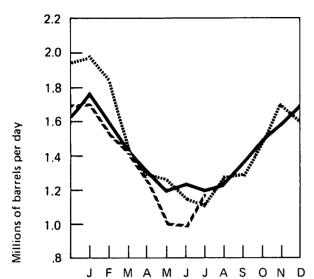
Natural Gas Liquids

		Domestic Demand*	Productio	n*	Used at Refineries*	Imports	Stocks*
			At processing	At			
			plants	refineries			In thousands
			In thousands of barr	els per day			of barrels
1972	January	1,746	1,705	339	832	196	82,805
	February	1,752	1,747	359	842	182	73,170
	March	1,416	1,768	360	811	186	73,438
	April	1,181	1,769	361	775	119	79,754
	May	996	1,737	364	791	147	91,512
	June	1,114	1,734	361	795	134	99,556
	July	1,121	1,731	372	794	141	107,330
	August	1,244	1,739	369	791	164	112,246
	September	1,244	1,751	359	835	169	116,184
	October	1,525	1,769	345	869	202	111,983
	November	1,768	1,757	336	917	222	100,130
	December	1,946	1,721	350	866	231	84,243
	AVG.	1,420	1,744	356	826	174	
1973	•	1,994	1,680	361	839	312	68,792
	February	1,857	1,745	359	836	312	60,606
	March	1,407	1,734	378	790	260	63,873
	April	1,299	1,750	373	733	201	71,266
	May	1,270	1,739	421	733	217	80,650
	June	1,149	1,727	388	757	163	89,433
	July	1,109	1,737	410	849	199	99,631
	August	1,281	1,748	390	858	240	105,068
	September	1,297	1,741	370	833	206	110,002
	October	1,499	1,756	377	835	249	109,639
	November December	1,703 1,607	1,774 1,729	331 338	876 842	286 232	104,192
	AVG.	1,454	1,738	375	815	232 239	98,940
1974	January	1,778	, 1,699	327	794	304	91,210
	February	1,593	1,728	337	777	294	90,145
	March	1,408	1,741	341	720	224	94,817
	April	1,321	1,696	353	690	215	101,352
	May	1,180	1,690	340	678	182	110,881
	June	1,242	1,684	368	718	199	117,915
	July	1,187	1,657	364	723	163	125,427
	August	1,221	1,676	361	742	163	131,675
	September	1,360	1,638	348	738	166	133,215
	October	1,493	1,686	330	788	200	130,557
	November	1,596	1,694	301	795	199	124,447
	December	1,692	1,670	286	796	230	114,295
	AVG.	1,422	1,688	338	746	211	
1975	January	1,708	1,630	307	756	257	105,400
	February	1,512	1,646	296	734	181	100,945
	March	1,404	1,658	280	731	178	99,168
	April	1,242 1,002	1,635 1,607	273 299	667 628	176 97	100,408
	May June	998	1,646	323	659	166	112,737 125,215
	July	1,191	1,621	323 336	701	173	131,359
	AVG.	1,292	1,635	302	69 7	175 1 75	131,338
	(7 months)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,555	302	30 ,	.,,	

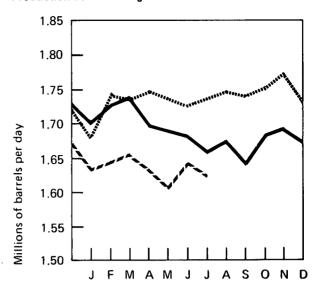
Source: Bureau of Mines.

^{*}See Explanatory Note 5. R=Revised data.

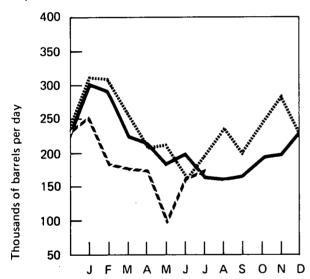




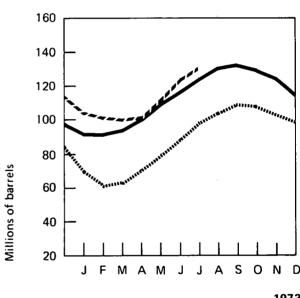
Production at Processing Plants







Stocks



..... 1973 — 1974 — 1975

Natural Gas

		Domestic Consumption*	Marketed Production*	Domestic Producer Sales to Major Interstate Pipelines	Imports
				In billion cubic feet	
1972	January	NA	1,994	1,086	117
	February	NA	1,902	1,035	112
	March	NA	1,937	1,091	88
	April	NA	1,893	1,050	134
	May	NA	1,867	1,045	111
	June	NA	1,797	985	108
	July	NA	1,837	1,013	102
	August	NA	1,859	1,007	97
	September	NA	1,854	970	114
	October	NA	1,889	1,040	103
	November	NA	1,896	1,041	111
	December TOTAL	NA 33 101	1,961	1,065	111
4070		22,101	**22,532	12,429	**1,019
1973	January February	2,348 2,126	1,994 1,821	1,069	93
	March	2,015	1,952	963 1,052	84
	April	1,835	1,864	1,052	91 88
	May	1,729	1,898	1,026	86
	June	1,534	1,839	963	79
	July	1,558	1,880	999	80
	August	1,582	1,896	994	85
	September	1,527	1,840	956	82
	October	1,708	1,875	1,001	91
	November	1,905	1,863	1,000	85
	December	2,182	1,926	1,038	89
	TOTAL	22,049	22,648	12,067	1,033
1974	January	2,230	1,929	1,033	86
	February	2,054	1,759	941	79
	March	2,003	1,886	1,027	85
	April May	1,691	1,793	987	83
	May June	1,608 1,439	1,846 1,740	981	80
	July	1,514	1,818	928 947	74 74
	August	1,510	1,790	932	74 76
	September	1,537	1,755	871	70
	October	1,706	1,767	936	83
	November	1,827	1,729	921	82
	December	2,104	1,790	959	87
	TOTAL	21,223	21,601	11,463	959
1975	January	2,123	1,771	950	81
	February	1,943	1,635	867	75
	March	1,904	1,733	948	83
	April	1,651	1,669	906	83
	May	1,335	1,681	898	81
	June July	1,255	1,626 B1 660	859	78
	August	1,310 1,370	R1,669 R**1,669	873 882	79
	September	1,410	†1,620	882	R76
	October	1,600	†1,660		R†71 †82
	TOTAL	15,901	16,733	7,183	789
	· · ·	(10 months)	(10 months)	(8 months)	(10 months)
*Soo Ev	nlanatory Note 6			(3 ((())))	,

^{*}See Explanatory Note 6.

**Yearly total reflects subsequent data revisions and therefore does not agree with cumulative monthly data.

^{***}Preliminary data.

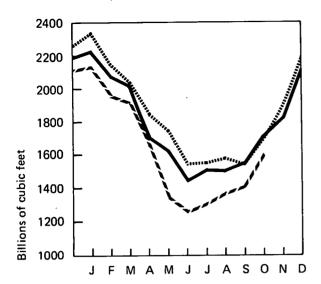
[†]Projected data.

R=Revised data.

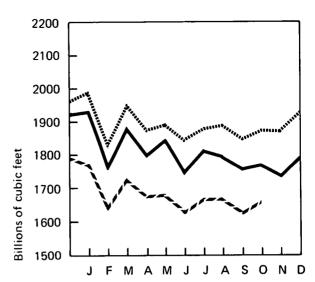
Sources: Consumption, Marketed Production, and Imports-Bureau of Mines. Domestic Producer Sales-Federal Power Commission.

NA=Not available.

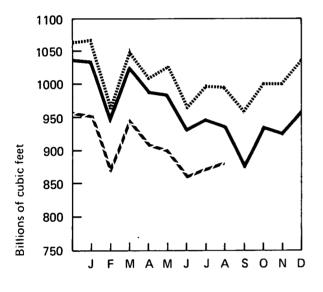
Domestic Consumption



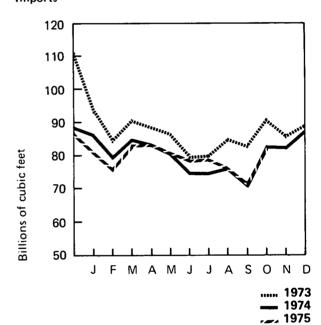
Marketed Production



Domestic Producer Sales to Major Interstate Pipelines



Imports



23

Coal

Bituminous and Lignite

		Domestic		_	
		Consumption*	Production**	Exports	Stocks
			In thousands of	short tons	
1972	January	43,951	49,680	3,660	91,178
	February	43,178	49,112	3,630	92,183
	March	43,773	54,438	4,624	96,795
	April	40,158	49,814	4,915	102,981
	May	40,588	52,879	5,416	110,577
	June	40,505	50,083	4,882	115,723
	July	43,071	40,964	3,627	111,353
	August	44,698	52,169	6,337	114,665
	September	42,002	49,374	4,923	116,196
	October	43,050	51,671	5,210	120,135
	November	44,104	50,297	5,380	121,401
	December	47,698	44,904	3,392	117,442
	TOTAL***	516,776	595,386	55,997	
1973	January	49,838	49,379	2,954	111,120
	February	44,652	45,893	2,669	108,870
	March	44,814	50,547	3,377	111,490
	April	42,689	46,999	5,063	112,585
	May	43,628	51,420	5,140	116,890
	June	45,115	46,613	4,969	109,960
	July	47,715	43,801	4,188	107,390
	August	48,840	55,874	5,133	106,910
	September	45,471	48,338	3,424	106,230
	October	46,427	54,382	5,882	107,490
	November	46,703	49,826	5,214	107,169
	December	50,130	48,666	4,889	103,022
	TOTAL***	556,022	591,738	52,903	105,022
1974	January	50,046	53,530	2,813	97,836
	February	44,929	49,851	4,627	95,812
	March	45,858	51,027	3,179	101,568
	April	43,595	54,181	4,944	107,167
	May	44,951	57,448	6,032	112,882
	June	44,315	47,884	6,369	111,935
	July	48,605	49,206	5,307	106,160
	August	48,579	51,605	5,088	105,478
	September	43,844	52,470	4,893	109,173
	October	45,868	R60,295	7,342	118,670
	November	44,598	33,524	6,744	109,192
	December	47,521	39,980	2,587	95,528
	TOTAL***	552,709	601,000	59,926	55,525
1975	January	49,669	54,885	4,254	96,024
	February	45,725	51,135	4,470	97,164
	March	47,396	51,910	5,653	97,904
	April	43,753	53,135	6,159	102,745
	May	42,683	55,370	7,011	109,796
	June	R44,887	55,730	6,269	R115,041
	July	47,485	45,560	4,691	109,313
	August	49,091	49,345	5,859	108,680
	September		55,660	4,529	
	October		†61,000		
	TOTAL***	370,689	533,730	48,895	
u _		(8 months)	(10 months)	(9 months)	

Source: Bureau of Mines.

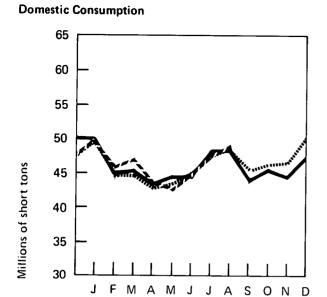
^{*}See Explanatory Note 7.

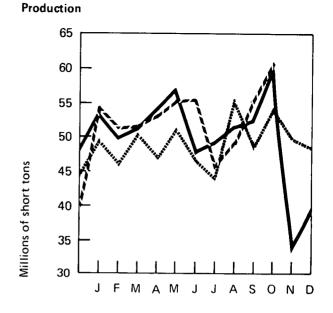
**See Explanatory Note 8.

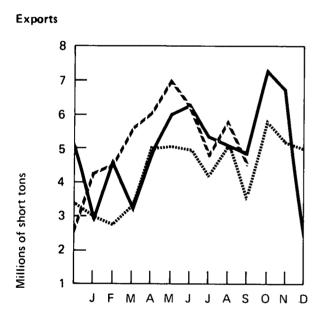
***Totals may not add due to rounding.

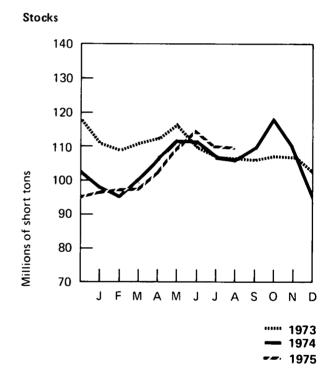
**Preliminary data.

R=Revised data.









ELECTRIC UTILITIES

Preliminary data indicate that electric utilities produced 153,655 million kilowatt hours in October 1975, 1.2 percent above the level for October 1974. Production during the first 10 months of 1975 totaled 1,583,640 million kilowatt hours, up 1.8 percent from the 1,555,957 million kilowatt hours produced during the same period in 1974.

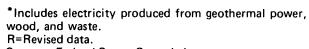
Sales of electricity to residential and commercial customers during the first 8 months of 1975 totaled 685,424 million kilowatt hours, an increase of 6.5 percent for residential customers and 7.7 percent for commercial customers over sales for the corresponding period in 1974. Sales to industry, on the other hand, at 430,638 million kilowatt hours, were 5.6 percent below the level for the first 8 months of 1974.

Part 3

Electric Utilities

Electric Utilities

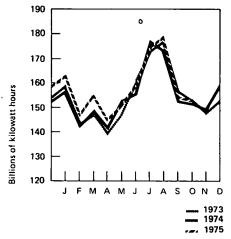
		Total Net Produ	uction	Р	Percentage Produced from Each Source				
		In million kilowatt h		Oil	Gas	Nuclear	Hydro- electric	Other*	
1972	January February March April May June July August September October November December	144,575 137,301 140,056 132,138 137,745 145,523 157,846 162,822 147,358 143,742 143,867 154,350	45.5 45.8 44.4 43.6 43.4 42.2 42.8 43.5 44.4 45.7 46.0	18.0 17.3 15.2 13.5 12.7 13.4 14.1 13.8 14.7 16.4 18.3 19.5	16.6 18.1 20.0 22.3 24.0 25.5 25.7 25.8 25.5 22.2 17.2	2.9 2.6 3.1 2.8 2.1 2.6 3.0 3.5 3.2 3.4 3.8 3.9	16.9 16.1 17.2 17.7 17.7 16.0 14.9 14.0 13.0 13.5 14.9 16.1	0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	
	TOTAL	1,747,323	AVERAGE 44.1	15.6	21.5	3.9 3.1	15.6	0.1 0.1	
1973	January February March April May June July August September October November December	159,320 143,109 147,754 139,273 147,021 160,962 173,461 177,022 156,294 153,797 147,823 153,284 1,859,090	47.2 47.4 45.7 46.1 44.3 43.3 43.9 44.4 45.7 45.6 47.2 47.9 AVERAGE 45.7	19.4 18.2 16.2 14.4 14.7 16.1 16.5 17.3 17.3 17.7 17.6 16.3 16.8	13.1 14.1 16.2 17.9 20.2 21.6 22.6 21.9 21.1 19.9 16.1 13.3 18.3	3.9 4.1 4.5 4.2 3.9 4.2 4.0 4.4 4.9 5.5 5.3 4.5	16.3 16.1 17.3 17.3 16.8 14.7 12.9 11.9 10.9 11.8 13.5 17.0 14.6	0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	
1974	January February March April May June July August September October November December TOTAL	156,906 142,371 149,933 141,913 153,439 156,027 177,797 173,699 152,083 151,786 149,581 159,309	47.0 46.6 45.3 44.5 44.3 42.9 43.1 42.9 44.3 44.9 45.6 AVERAGE 44.5	16.6 15.7 14.6 13.9 14.7 14.7 15.6 16.4 16.7 18.4 19.3 16.1	13.3 13.3 15.8 16.9 18.4 20.3 20.9 20.3 19.3 18.6 15.2 12.4	4.8 5.6 5.8 4.9 4.2 4.4 5.6 7.0 7.1 7.0 7.2 8.1 6.0	18.2 18.6 18.4 19.6 18.2 17.1 14.8 13.8 14.1 13.2 14.1 14.4 16.1	0.1 0.2 0.1 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	
1975	January February March April May June July August September October TOTAL (10 months)	163,498 146,338 154,932 145,289 151,168 159,963 175,856 R179,202 154,595 153,655 1,583,640	45.8 46.0 44.6 44.2 42.5 43.4 43.1 R43.9 AVERAGE 44.1 (8 months)	18.7 17.0 15.0 14.6 13.9 14.3 14.2 R15.6	12.1 12.3 13.0 14.0 16.9 18.0 19.4 19.0	8.1 8.3 9.2 8.7 8.2 7.2 8.6 R8.7	15.2 16.3 18.1 18.3 18.3 16.9 14.5 R12.6	0.1 0.1 0.2 0.2 0.2 0.2 0.2	



Sources: Federal Power Commission.

Production data for latest 2 months are from Edison

Electric Institute.

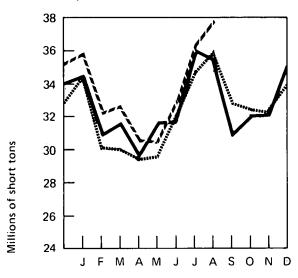


Total Net Production

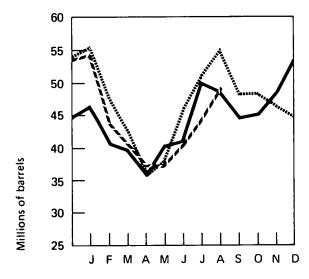
Fuel Consumption

	Fuel Consumption					
	Coal	Oil	Gas			
	In thousands of short tons	In thousands of barrels	In millions of cubic feet			
1972 January	30,231	46,555	251,029			
February	28,946	43,325	258,859			
March	28,472	38,809	294,804			
April	26,093	32,325	312,229			
May	26,823	32,106	351,543			
June	27,749	35,098	394,585			
July	30,214	40,646	433,533			
August	31,651	41,073	448,594			
September	28,988	38,723	398,799			
October	29,133	42,876	337,567			
November	29,926	47,914	262,447			
December	32,817	54,479	234,683			
TOTAL	351,043	493,929	3,978,672			
1973 January	34,591	55,773	219,270			
February	30,921	46,978	212,983			
March	30,746	42,701	255,314			
April	29,209	35,845	267,151			
May	29,683	38,097	316,989			
June	31,951	46,421	371,221			
July	34,863	51,352	422,396			
August	36,093	55,356	419,507			
September	32,814	48,103	353,040			
October	32,470	48,188	328,630			
November	32,154	46,420	252,341			
December	34,141	44,850	216,988			
TOTAL	389,636	560,084	3,635,830			
1974 January	34,599	46,745	219,338			
February	30,857	40,687	201,587			
March	31,638	39,645	254,175			
April	29,679	35,959	259,313			
May	31,700	40,831	306,945			
June	31,719	41,227	346,584			
Ju!y	36,111	50,119	403,391			
August	35,555	48,970	380,585			
September	30,989	44,550	313,079			
October	32,127	45,268	298,109			
November	32,211	48,525	238,908			
December	35,176	53,648	207,095			
TOTAL	392,361	536,174	3,429,109			
1975 January	35,853	54,169	204,931			
February	32,104	43,670	188,684			
March	32 7 <u>8</u> 3	40 300	210 283			

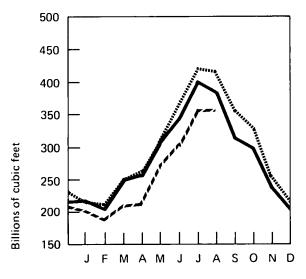
Coal Consumption



Oil Consumption



Gas Consumption



1973 1974 1975

Source: Federal Power Commission.

32,783

30,452

30,410

33,058

36,367

R37,839

TOTAL R268,866

40,399

37,099

37,015

40,791

44,329

R49,262

R346,734

210,283

213,580

271,790

306,147

359,160

R359,117

R2,113,692

March

April

May

June

July

August

(8 months)

Electric Utilities (Continued)

Stocks at End of Month Coal In thousands In thousands of short tons of barrels 1972 January 76.876 46,055 77,138 February 47.111 80,296 March 52,213 84,984 April 55.730 May 91,778 57,399 96,553 58,815 June 93,760 July 60,786 August 96,611 66,024 September 98,396 66,004 102,205 October 65,531 102,477 62,067 November 98,671 December 57,686 1973 95,017 53,691 January February 92,993 50.858 March 93,986 54,885 April 94,991 62,411 May 98,722 64,259 June 97,995 65,003 July 92,215 67,987 August 91,356 73,259 September 90,156 74,863 October 91,428 76,343 November 90,369 81,224 December 86,880 88,228 1974 January 83,366 89,053 February 80,962 92,645 March 84,257 94,187 April 90,901 100,210 May 93,628 103,606 95,811 104,316 June 105,919 July 91,616 89,691 August 110,997 September 92,704 113,570 October 98,373 117,564 116,558 November 93,825 December 83,652 111,990 1975 January 81,429 110,304 81,065 February 111,581 March 81,872 113,377 April 86,656 113,930 93,027 May 116,940 June 97,834 119,653

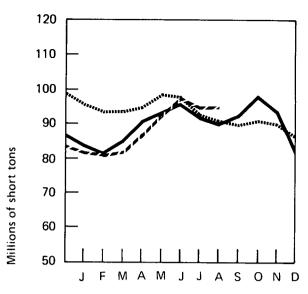
94,067

R94,107

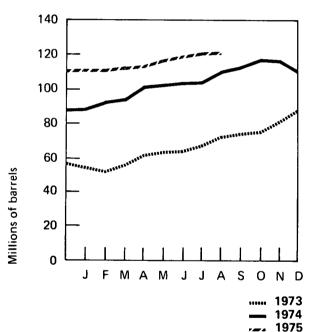
121,076

R120,601

Coal Stocks







Source: Federal Power Commission.

July

August

			Sales					
		Residential	Commercial	Industrial	Other*	Total		
	In millions of kilowatt hours							
1972	January February March April May June July August September October November December TOTAL	46,353 45,652 43,559 40,460 38,044 41,213 47,813 51,463 50,888 44,352 41,672 47,139 538,608	27,965 27,921 27,856 27,765 27,983 30,257 32,211 33,535 33,532 31,068 29,426 29,764 359,273	50,526 50,552 52,086 51,992 53,489 53,673 52,702 55,023 55,548 56,213 55,251 53,923 640,978	4,579 4,619 4,606 4,422 4,430 4,469 4,666 4,723 4,928 4,823 4,986 5,060 56,311	129,423 128,744 128,107 124,639 123,946 129,612 137,392 144,744 144,886 136,456 131,335 135,886		
1973	January February March April May June July August September October November December TOTAL	52,840 49,601 46,315 41,821 39,825 44,967 54,123 56,742 56,210 47,207 43,175 46,442 579,268	31,182 30,445 30,100 29,038 30,060 33,194 36,147 36,820 36,711 33,289 31,363 29,788 388,137	55,274 54,591 55,866 55,937 56,838 57,368 57,152 58,865 59,178 60,514 58,464 56,190 686,237	5,209 4,909 4,822 4,571 4,638 4,764 5,140 5,054 5,211 5,032 5,085 4,896 59,331	144,505 139,546 137,103 131,361 140,293 152,562 157,481 157,310 146,042 138,087 137,316		
1974	January February March April May June July August September October November December TOTAL	52,846 47,832 46,154 43,294 41,215 46,596 53,435 56,558 53,252 44,177 42,773 50,368 578,500	30,608 29,542 29,309 28,986 29,876 32,800 35,229 36,414 35,830 32,112 30,968 31,757 383,431	55,754 54,978 55,999 56,497 57,386 58,077 57,899 59,803 60,366 60,053 57,361 53,878 688,051	4,995 4,708 4,693 4,610 4,685 4,641 4,965 5,069 4,983 4,792 4,969 4,974 58,084	144,203 137,060 136,155 133,387 133,162 142,114 151,528 157,844 154,431 141,134 136,071 140,977 1,708,066		
1975	January February March April May June July	55,547 52,185 49,974 46,883 43,226 48,461 56,829	33,026 32,441 32,005 31,335 31,608 35,266 37,891	54,280 53,142 53,182 52,526 53,364 54,104 53,973	5,245 4,984 4,914 4,737 4,745 4,777 5,052	148,098 142,752 140,075 135,481 132,943 142,608 153,745		

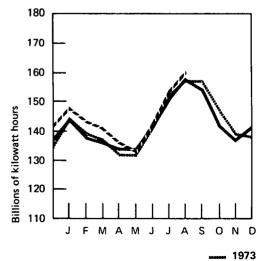
37,891 38,768 **272,340**

Total Sales

160,037 **1,155,739**

5,052 5,223 **39,677**

53,973 56,067 **430,638**



1974 -- 1975

July

August

TOTAL (8 months) 56,829

59,979

413,084

^{*}Includes street lighting and trolley cars. Source: Federal Power Commission.

NUCLEAR POWER

The 49 nuclear powerplants in commercial operation, with a total maximum dependable capacity of 31,971 megawatts, performed at 61 percent of capacity during October.

There are four plants currently in power ascension (precommercial testing) status, with a total capacity of 2,719 megawatts. They include: Brunswick 2 (808 megawatts) and Hatch 1 (768 megawatts), which are boiling water reactors owned by Carolina Power and Light Company and Georgia Power Company, respectively; Millstone 2 (795 megawatts), a pressurized water reactor owned by the Northeast Nuclear Energy Company; and Fort St. Vrain (330 megawatts), a high temperature gas-cooled reactor owned by the Public Service Company of Colorado. The first three reactors are scheduled for commercial status in December, and the latter is forecasted to achieve similar status in March 1976.

Although enriched uranium deliveries in October decreased 18 percent from deliveries made during September, the delivered material was 12 percent more concentrated in fissionable uranium (U-235). Foreign orders constituted 60 percent of the deliveries and went primarily to Japanese, German, and Swedish utilities.

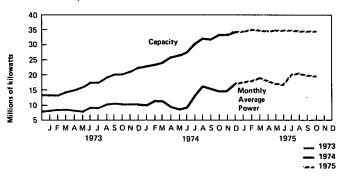
A total of 14 suits have been filed by 17 utility companies against the Westinghouse Electric Corporation in response to that company's default on future uranium contracts. Approximately 80 million pounds of uranium, which is about half of the domestic utility requirements for the next 10 years, are involved in the dispute. A Westinghouse request for consolidation of all the lawsuits will be heard on December 12 in Philadelphia by the U.S. Judicial Panel on Multidistrict Litigation.

Part 4

Nuclear Power

		Net Electrical Capacity	Net Monthly Average Power	Percent of Total Domestic Electricity Generation
		In thousand	s of kilowatts	
1972	January February March April May June July August September October November December AVG.	8,896 8,896 9,400 10,200 10,680 11,350 12,138 12,138 12,138 13,594 13,594 13,594 11,394	5,720 5,165 5,750 5,124 3,918 5,375 6,227 7,742 6,589 6,539 7,475 8,125 6,151	2.9 2.6 3.0 2.7 2.1 2.6 2.9 3.5 3.2 3.2 3.7 3.9 3.1
1973	January February March April May June July August September October November December AVG.	13,594 13,594 14,382 15,253 16,126 17,827 17,827 19,349 20,400 20,400 21,271 22,826 17,761	8,395 8,821 8,991 8,161 7,657 9,429 9,355 10,463 10,815 10,036 11,308 10,543 9,513	3.9 4.1 4.5 4.2 3.9 4.2 4.0 4.4 4.9 5.5 5.3 4.5
1974	January February March April May June July August September October November December AVG.	23,156 23,926 24,455 26,012 26,820 27,898 30,524 32,195 31,759 33,614 33,630 34,467 29,071	10,194 11,992 11,715 9,826 8,791 9,740 13,577 16,442 15,159 14,409 14,528 17,375 12,865	4.8 5.6 5.8 4.9 4.2 4.4 5.6 7.0 7.1 7.1 7.2 8.1 6.0
1975	January February March April May June July August September October AVG. (10 mon	34,841 35,049 34,836 34,167 34,167 34,472 R34,746 R34,739 R34,690 34,690 34,649	17,843 18,063 19,091 17,516 16,613 16,097 20,297 20,618 *19,704 *19,489 18,545	8.1 8.3 9.2 8.7 8.2 7.2 8.6 R8.7 *9.2 *8.9 8.5





R=Revised data.

Sources: Average Power for latest 2 months and Capacity are from U.S. Nuclear Regulatory Commission; Percent of Total Domestic Electricity Generation for latest 2 months is based on data from Edison Electric Institute; remaining data are from Federal Power Commission.

^{*}Preliminary data.

Status of Nuclear Powerplants - October 31, 1975

Status	Number of Plants				Capacity	
	Boiling Water Reactors	High- Temperature Gas Reactors	Pressurized Water Reactors	Other*	Total	In Electrical Megawatts
Licensed to operate Construction permit granted Construction permit pending Orders placed for plant Publicly announced	23 19 22 10	1 0 4 0	30 45 51 16	0 0 1 0 18	54 64 78 26 18	37,000 64,000 87,000 30,000 23,000
Total	74	5	142	19	240	241,000

^{*}Includes 1 Liquid Metal Fast Breeder Reactor and 18 announced intentions to order for which a reactor type has not been chosen.

Source: U.S. Nuclear Regulatory Commission.

U.S. Uranium Enrichment - October 1975

	Domestic Customers	Foreign Customers	Total
Separative Work Performed (in metric tons of separative work units) Cost (in millions of dollars)	317.297 15.745	436.984 21.829	754.281 37.574 212.629
Product Quantity (in metric tons of uranium) Average Enrichment (in percent U-235) Feed Requirement (in metric tons of uranium)	85.832 2.711 421.775	126.797 2.589 592.893	2.638 1,014.668

Source: U.S. Energy Research and Development Administration.

Commercial Nuclear Power Generation by Major Non-Communist Countries — October 1975

			Generation of Electricity			
Country	Number of Reactors	Capacity	Generation October	Percent of October	f Capacity Year 1974	
		In thousands of gross electrical kilowatts	In millions of gross kilowatt hours			
Canada Federal Republic of Germany France Great Britain India Italy Japan Spain Sweden Switzerland United States	5 7 10 29 3 3 5 5	2,380 3,450 3,070 6,140 620 630 4,450 1,120 3,310 1,050 38,130	985 2,197 1,512 *2,480 NA 232 1,484 658 1,452 714	56 86 66 *54 NA 49 45 79 59 91	74 57 57 61 55 61 61 75 20 76	
Total	130	64,350	27,204	57	58	

^{*}Figures are for 4-week operating period.

NA=Not available.

Source: Nucleonics Week Magazine.

Fuel Cycle Activity	Product	Processed Material*	Percent Utilization of Industry Capacity	Energy Content of Processed Material**	Energy Consumed in Fuel Cycle Activity***	Cost Contribution to Electric Power [†]
		In MTU except where noted		In bill	ion Btu	In mills per kilowatt hour
Milling	Yellowcake (U ₃ O ₈) Deliveries	883	61	302,000	490	0.54
Conversion	Uranium Hexa- fluoride (UF ₆) Deliveries	0	0	0	0	0.07
Enrichment	Enriched UF ₆ Deliveries	261 (708 MT-SWU)	53	535,000	28,100	0.86
Fabrication	Finished Fuel Assemblies Produced	174	73	32,500	25	0.46
Powerplant Operation	New Fuel Receipts	276	_	566,000	_	-
	Electricity Generated	15,151 (million kWhe)	60	150,000	2,600	8.37
	Spent Fuel Discharged	84	-	_	-	-
Reprocessing	Spent Fuel Received	12	-	-	_	0.02
	Spent Fuel Reprocessed	0	-	_		-

^{*}Units of measure are discussed in Explanatory Notes 9 and 10.

^{**}Assumes 25,000 MWD/MTU for heat content of enriched uranium and a 6:1 feed-to-product ratio at the enrichment plant.
***Energy requirements for processing are obtained from U.S.A.E.C. Report No.WASH 1248.

^{*}Cost contribution is computed from unit prices paid for current month's production and requirement for a model 1000-MWe reactor operating at 80 percent capacity factor, given in U.S.A.E.C. Report No.WASH 1174-74. Because of the long lead time required for nuclear fuel processing, the sum of the numbers in this column does not necessarily reflect the fuel cost of current electricity

production.

+ ERDA's enrichment plants are presently operating at maximum utilization of available electric power, with the excess production being placed in the "preproduction stockpile" in anticipation of high demand for enriched uranium in the 1980's. Source: FEA.

ENERGY CONSUMPTION

Domestic energy consumption in September 1975 totaled 5.486 quadrillion Btu, 2.3 percent below the September 1974 level of 5.616 quadrillion Btu and 3.4 percent below the September 1973 level of 5.678 quadrillion Btu. No sectoral breakdown is available for the month as yet.

The revised consumption total for August was 5.763 quadrillion Btu, of which 2.006 quadrillion Btu was consumed by the residential and commercial sector, up 3.1 percent from the level for August 1974 and up 1.0 percent from the August 1973 level. Direct consumption of primary fuels amounted to 38.2 percent of total sector consumption (coal was 0.7 percent; dry natural gas, 12.9 percent; and petroleum products, 24.6 percent). Consumption of electricity accounted for the remaining 61.8 percent.

The industrial sector consumed 2.173 quadrillion Btu in August 1975, down 9.1 percent from the level for August 1974 and 11.4 percent from the August 1973 level. Coal accounted for 14.1 percent of the total, 33.9 percent was dry natural gas, 20.8 percent was petroleum products, and 31.2 percent was electricity.

Consumption in the transportation sector was 1.584 quadrillion Btu, 0.4 percent below August 1974 consumption and 4.1 percent below August 1973 consumption. Petroleum products comprised 96.6 percent of the total used. Natural gas used for pipeline transportation and electricity used for railroads and for street and highway lighting accounted for the balance.

PETROLEUM CONSUMPTION AND FORECAST

Total demand for petroleum products during October 1975 was 15.865 million barrels per day. This was 564,000 barrels per day, or 3.4 percent, below the forecast level, and 1,160,000 barrels per day (6.8 percent) below the demand level for last October.

Domestic demand for motor gasoline in October was 6.566 million barrels per day, which was 33,000 barrels per day below the forecast level of 6.599 million barrels per day. Demand was also 146,000 barrels per day, or 2.2 percent, below the level for last October.

Domestic demand for distillate fuel oil was 2.878 million barrels per day in October. This was 176,000 barrels per day (6.5 percent) above the forecast level and 15,000 barrels per day above the demand level for last October.

Domestic demand for residual fuel oil during October was 2.052 million barrels per day, which was 476,000 barrels per day, or 18.8 percent, below the forecast level of 2.528 million barrels per day and 558,000 barrels per day (21.4 percent) below the demand level for last October.

Part 5

Consumption

Energy Consumption

Energy Consumption by Economic Sector and Primary Source — August 1975 [In quadrillion (10¹⁵) Btu]

Sector ¹		Primary Energy Consumption				
	Coal ²	Natural Gas (dry) ³	Petroleum ⁴	Hydroelectric ⁵	Nuclear ⁶	
Residential and Commercial	0.014	0.258	0.495	_	_	0.767
Industrial	0.305	0.737	0.451	0.003	_	1.496
Transportation	0.001	0.036	1.530	_	(°)	1.567
Electric Utilities	0.852	0.368	0.301	0.245	0.167	1.934
TOTAL	1.171	1.399	2.778	0.248	0.167	5.763

¹See Explanatory Note 11 for definitions of the Residential and Commercial, Industrial, Transportation, and Electric Utilities Sectors.

² Data are from the Bureau of Mines, Includes anthracite and bituminous coal and lignite.

Aggregate data are from the Bureau of Mines. FPC provided data on natural gas consumed by electric utilities. Data from the American Gas Association are used for the Residential and Commercial Sector, adjusted to include a portion of the AGA "Other" category. Natural gas used in transportation, mostly for pipeline use, is estimated to be 3.5 percent of total natural gas consumption less electric utilities. This percentage is derived from 1974 Bureau of Mines data on consumption. The Industrial Sector is then the difference between the total and the sum of the other sectors.

⁴ Aggregate petroleum data are from the Bureau of Mines. FPC provided data on oil consumed by electric utilities. Petroleum consumed in transportation was calculated based on Department of Transportation data as follows: Motor gasoline - 100 percent; naphtha jet fuel - 100 percent; kerosine jet fuel - 97 percent; distillate fuel oil - 30.3 percent; residual fuel oil - 11.2 percent; all other products -4.7 percent. The remainder is distributed to economic sectors using the following percentage shares, derived from 1974 Bureau of Mines data on consumption: Residential and Commercial - 52.3 percent; Industrial - 47.7 percent.

⁵ FPC hydroelectric power production plus net imports of electricity from Canada. These imports, estimated at 0.011 quadrillion Btu per month, were assumed to be from hydroelectric power sources. Monthly industrial hydroelectric power consumption is estimated to be one-twelfth of the preliminary Bureau of Mines annual figure for 1974. ⁶ FPC nuclear power production.

⁷Electricity was distributed using FPC and Edison Electric Institute data on kilowatt-hour sales to ultimate customers. Electrical energy consumed by railroads and for street and highway lighting was distributed to the Transportation Sector. All "other" sales, largely for use in government buildings, were distributed to the Residential and Commer-

cial Sector.

8 In generating electricity with nuclear or fossil fuels, approximately 65 percent of the energy is lost in the form of heat. Transmission and distribution losses consume about an additional 3 percent of the energy inputs of the utility industry. In order to fully account for all energy consumed both directly and indirectly (i.e., ultimate energy disposition), the electricity losses are allocated to the final end-use sectors in proportion to their direct kilowatt-hour usage.

⁹ Negligible.

Electricity Distributed ⁷	Net Energy Consumption	Electrical Energy Loss Distributed ⁸	Ultimate Energy Disposition
0.350	1.117	0.890	2.006
0.191	1.687	0.486	2.173
0.005	1.571	0.012	1.584
	_	_	_
0.546	4.375	1.388	5.763

Percent Changes in Energy Consumption for August 1975 by Source

	August 1975 Consumption	Percent Change from August 1974	Cumulative Percent Change from 1974 (January through August)
	In quadrillion (10 ¹⁵) Btu		
Refined Petroleum Products	2.778	- 1.8	- 0.8
Motor Gasoline Jet Fuel Distillate Residual Other Petroleum Products	1.156 0.180 0.404 0.432 0.606	+ 0.6 + 0.1 - 2.5 -12.7 + 0.9	+ 2.4 + 4.2 + 0.9 - 4.8 - 6.5
Natural Gas (Dry)	1.399	- 9.3	- 8.2
Coal (Anthracite, bituminous, and lignite)	1.171	+ 0.8	- 0.2
Electricity (Sales)	0.546	+ 1.4	+ 1.8
Total Energy Use	5.763	- 2.8	- 2.2
Economic Sector Consumption Residential and Commercial Industrial Transportation	2.006 2.173 1.584	+ 3.1 - 9.1 - 0.4	+ 3.7 -10.3 + 1.7

Energy Consumption (Continued)

Energy Consumption by the Residential and Commercial Economic Sector¹

		Coal	Natural Gas (dry)	Petroleum ²	Electricity Distributed	Electrical Energy Loss Distributed	Total Energy Use	Cumulative Total Energy Use
				In quadrillion (1	0 ^{1 5}) Btu			
1973	January February March April May June July August September October November December	0.038 0.032 0.025 0.016 0.017 0.017 0.018 0.024 0.028 0.031 0.033	1.277 1.131 0.939 0.755 0.543 0.350 0.270 0.243 0.269 0.339 0.617 0.897	0.707 0.653 0.620 0.527 0.562 0.511 0.503 0.560 0.538 0.592 0.658 0.648	0.299 0.285 0.272 0.253 0.250 0.279 0.321 0.332 0.330 0.287 0.266 0.271	0.716 0.610 0.629 0.569 0.612 0.714 0.814 0.835 0.690 0.651 0.615	3.037 2.711 2.486 2.120 1.983 1.869 1.925 1.987 1.852 1.987 2.188 2.515	3.037 5.748 8.233 10.353 12.336 14.205 16.130 18.118 19.970 21.867 24.055 26.569
	TOTAL	0.295	7.632	7.077	3.445	8.120	26.569	
1974	January February March April May June July August September October November December	0.041 0.035 0.028 0.019 0.017 0.016 0.015 0.021 0.026 0.028 0.028	1.174 1.040 0.912 0.760 0.500 0.353 0.286 0.257 0.271 0.393 0.574	0.663 0.593 0.567 0.532 0.499 0.510 0.506 0.522 0.513 0.591 0.575	0.296 0.275 0.268 0.258 0.254 0.282 0.315 0.330 0.316 0.271 0.263 0.292	0.705 0.607 0.650 0.602 0.661 0.692 0.852 0.817 0.659 0.643 0.644 0.745	2.880 2.550 2.426 2.170 1.930 1.853 1.974 1.946 1.786 1.927 2.084 2.643	2.880 5.430 7.856 10.026 11.956 13.809 15.783 17.729 19.515 21.441 23.525 26.167
1975	TOTAL January February March April May June July August TOTAL	0.306 0.036 0.023 0.025 0.011 0.011 0.015 0.017 0.014	7.463 R1.144 R1.126 R1.039 R0.917 R0.525 0.331 0.287 0.258 5.628	6.701 0.651 0.556 0.568 0.508 0.459 0.454 RO.484 0.495	3.420 0.315 0.300 0.291 0.278 0.267 0.297 0.336 0.350 2.434	8.277 0.772 0.661 0.711 0.649 0.678 0.754 0.873 0.890 5.989	26.167 R2.918 R2.667 R2.633 R2.365 R1.941 1.851 R1.999 2.006	R2.918 R5.585 R8.218 R10.583 R12.524 R14.376 R16.375 18.381

Energy Consumption by the Industrial Economic Sector¹

,	C C (C C C C C C C C C C C C C C C C C								
		Coal	Natural Gas (dry)	Petroleum ³	Hydroelectric	Electricity Distributed	Electrical Energy Loss Distributed	Total Energy Use	Cumulative Total Energy Use
				In quadrillic	on (10 ¹⁵) Btu				
1973	January February March April May June July August September October November	0.393 0.362 0.369 0.363 0.369 0.351 0.345 0.340 0.329 0.363 0.374	0.812 0.746 0.787 0.783 0.843 0.792 0.845 0.883 1.014	0.640 0.591 0.561 0.477 0.508 0.462 0.455 0.506 0.487 0.535	0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003	0.189 0.186 0.191 0.194 0.196 0.195 0.201 0.202 0.206 0.199	0.452 0.399 0.441 0.430 0.475 0.502 0.494 0.505 0.422 0.469 0.460 0.470	2.488 2.286 2.351 2.247 2.392 2.305 2.337 2.453 2.327 2.591 2.637 2.693	2.488 4.775 7.126 9.373 11.764 14.069 16.406 18.859 21.186 23.777 26.413 29.107
	December TOTAL	0.412 4.370	1.031 10.438	0.586 6.403	0.003 0.036	0.192 2.341	5.518	2.093	29.107
1974	January February March April May June July August September October November December	0.390 0.365 0.370 0.364 0.354 0.337 0.336 0.347 0.336 0.359 0.323 0.319	0.807 0.785 0.812 0.651 0.783 0.723 0.809 0.856 0.995 0.994	0.605 0.541 0.518 0.485 0.465 0.465 0.462 0.476 0.468 0.539 0.525	0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003	0.190 0.188 0.191 0.193 0.196 0.198 0.198 0.204 0.206 0.205 0.196 0.184	0.452 0.414 0.463 0.451 0.510 0.486 0.535 0.505 0.430 0.430 0.479 0.470	2.448 2.296 2.355 2.146 2.300 2.212 2.342 2.391 2.378 2.585 2.516 2.476	2.448 4.744 7.099 9.246 11.546 13.758 16.100 18.491 20.869 23.454 25.971 28.447
1975	TOTAL January February March April May June July August	4.200 0.356 0.355 0.378 0.353 0.314 0.298 0.305	10.072 R0.746 R0.603 R0.631 R0.498 R0.521 R0.603 R0.648 0.737	6.111 0.594 0.507 0.518 0.464 0.419 0.414 R0.442 0.451	0.036 0.003 0.003 0.003 0.003 0.003 0.003 0.003	2.348 0.185 0.181 0.181 0.179 0.182 0.185 0.184 0.191 1.469	5.679 0.454 0.399 0.443 0.418 0.463 0.468 0.479 0.486 3.613	28.447 R2.338 R2.049 R2.154 R1.915 R1.921 R1.988 R2.054 2.173 16.593	R 2.338 R 4.387 R 6.542 R 8.457 R10.378 R12.366 R14.420 16.593
	TOTAL	2.692	4.986	3.810	0.024	1.469	3.013	10.593	

Energy Consumption (Continued)

Energy Consumption by the Transportation Economic Sector¹

		Coal	Natural Gas (dry) ⁴	Petroleum	Electricity Distributed	Electrical Energy Loss Distributed	Total Energy Use	Cumulative Total Energy Use
				In quadrillion (10¹⁵) Btu			
1973	January February March April May June July August September October November December	0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001	0.085 0.076 0.070 0.062 0.046 0.045 0.046 0.047 0.055 0.066	1,511 1,417 1,502 1,412 1,540 1,471 1,528 1,588 1,437 1,520 1,523 1,491	0.005 0.005 0.005 0.005 0.004 0.004 0.004 0.005 0.005 0.005 0.005	0.013 0.011 0.012 0.010 0.011 0.011 0.011 0.011 0.010 0.011 0.012 0.013	1.615 1.510 1.589 1.490 1.612 1.533 1.589 1.651 1.499 1.592 1.607 1.589	1.615 3.125 4.714 6.204 7.816 9.350 10.939 12.590 14.089 15.681 17.288 18.877
	TOTAL	0.009	0.733	17.940	0.058	0.137	18,877	
1974	January February March April May June July August September October November December	0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001	0.072 0.066 0.063 0.051 0.047 0.039 0.040 0.040 0.044 0.050 0.057 0.068	1.398 1.300 1.416 1.397 1.484 1.449 1.513 1.532 1.532 1.596 1.453 1.546	0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005	0.013 0.011 0.012 0.011 0.012 0.011 0.012 0.012 0.010 0.012 0.013 0.014	1.489 1.384 1.496 1.465 1.547 1.505 1.570 1.590 1.452 1.574 1.529 1.634	1.489 2.873 4.369 5.834 7.381 8.885 10.456 12.046 13.497 15.072 16.600 18.234
1975	TOTAL January February March April May June July August TOTAL	0.007 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001	0.636 0.069 0.063 0.061 0.051 0.038 R0.034 R0.034 0.036	17.386 1.499 1.334 1.456 1.456 1.481 1.466 R1.498 1.530 11.719	0.060 0.006 0.005 0.005 0.005 0.005 0.005 0.005 0.005	0.145 0.014 0.012 0.013 0.012 0.012 0.012 0.013 0.012 0.099	18.234 1.587 1.415 1.536 1.524 1.536 R1.517 R1.550 1.584 12.248	1.587 3.002 4.538 6.062 7.598 R9.115 R10.665 12.248

¹See Explanatory Note 11 for definitions of the Residential and Commercial, Industrial, and Transportation Sectors. The methodology used for sector calculations is provided in the footnotes of the previous table. Printed totals may differ slightly from the sum of their row/column components due to independent rounding.

The percentage share used in calculating Residential and Commercial consumption of petroleum was 52.5 percent for 1973 and 52.3

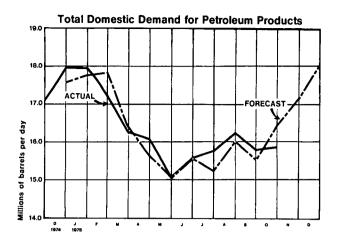
the percentage share used in calculating Residential and Commercial consumption of petroleum was 52.5 percent for 1973 and 52.3 percent for 1974 and 1975.

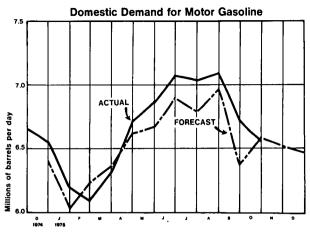
The percentage share used in calculating Industrial consumption of petroleum was 47.5 percent for 1973 and 47.7 percent for 1974 and 1975.

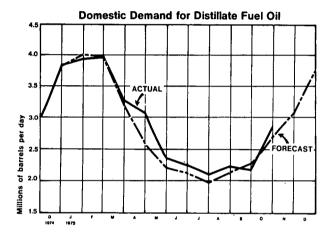
⁴Tne percentage share used in calculating Transportation consumption of natural gas was 3.9 percent for 1973 and 3.5 percent for 1974 and 1975.

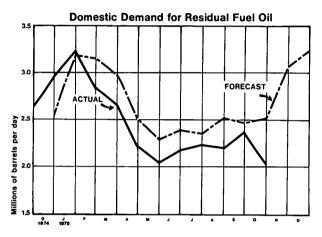
R=Revised data.

Petroleum Consumption and Forecast*









Notes:

Forecast

Domestic Demand — Demand for products, in terms of real consumption, is not available; production plus imports plus withdrawals from primary stocks is used as a proxy for consumption. Secondary stocks, not measured by FEA, are substantial for some products.

Actuals - Based on BOM data except for three most recent months, which are based on FEA data.

 Forecast petroleum product demand assumes normal weather conditions and projected economic activity. The forecast is periodically revised to take into account actual weather conditions and actual values of other predictor variables as they become available.

^{*}Forecast has been revised.

OIL AND GAS EXPLORATION

The rotary drilling rig count continued to rise in October. An average of 1,716 rigs were engaged in drilling for oil and gas, 17 more than were active in September, and the highest number since January 1962. Active rigs in October represented an increase of 8.3 percent over the level for the same month last year.

Well completions in October were also significantly higher than the number for a year ago. There were 3,625 wells drilled during the month, up 24.0 percent from the October 1974 level and up 57.5 percent from the level for the same month in 1973.

The number of seismic crews exploring for oil and gas declined during October for the second consecutive month. There were 270 crews (29 offshore and 241 onshore) operating in the United States and its territorial waters, which represents an increase of 7 land crews, but a decrease of 11 marine crews, from the September count. The decline in marine crews was significant because it was the largest single-month drop since the crew count was begun in May 1974. However, part of the drop was attributed to seasonal movement out of Alaskan waters to other areas of the world.

Part 6

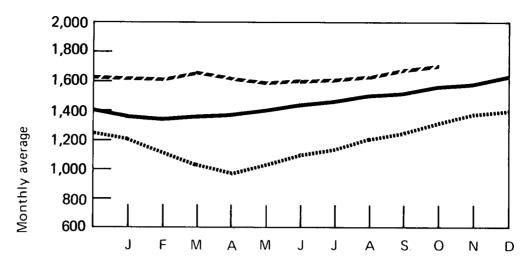
Resource Development

Oil and Gas Exploration

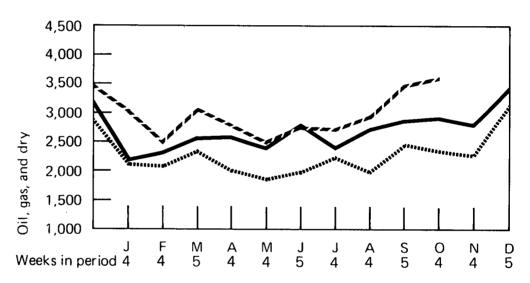
		Rotary Rig		We	ells Drilled		Total Footage of Wells Drilled
		Monthly av		Gas	Dry	Total	In thousands of feet
1972	January February March April May June July August September October November December AVG.	1,147 1,071 1,034 1,002 1,005 1,049 1,104 1,130 1,152 1,165 1,186 1,241 1,107	807 965 1,210 923 920 1,042 833 946 1,065 792 860 985 *TOTAL 11,306	281 350 394 355 332 395 335 410 468 539 535 536 4,928	851 955 889 788 816 903 795 924 1,009 919 975 1,290 11,057	1,939 2,270 2,493 2,066 2,068 2,340 1,963 2,280 2,542 2,250 2,370 2,811 27,291	9,441 12,382 12,406 9,902 10,218 11,010 9,213 11,335 11,634 10,944 12,361 14,190 134,602
1973	January February March April May June July August September October November December AVG.	1,219 1,126 1,049 993 1,046 1,118 1,155 1,222 1,266 1,334 1,390 1,405 1,194	758 777 953 699 749 767 912 724 854 790 822 1,087 *TOTAL 9,902	406 487 504 489 407 432 504 456 690 554 606 827 6,385	899 765 909 777 647 795 840 739 940 958 865 1,208 10,305	2,063 2,029 2,366 1,965 1,803 1,994 2,256 1,919 2,484 2,302 2,293 3,122 26,592	10,973 10,656 12,318 10,434 9,622 10,815 10,996 9,633 12,075 11,694 11,823 15,530
1974	January February March April May June July August September October November December AVG.	1,372 1,355 1,367 1,381 1,412 1,432 1,480 1,518 1,527 1,584 1,596 1,643 1,475	763 901 936 947 957 1,238 1,008 1,210 1,200 1,131 1,088 1,339 *TOTAL 12,784	577 600 638 700 520 586 461 555 600 551 626 791 7,240	803 816 1,003 945 870 982 884 968 1,091 1,241 1,053 1,274	2,143 2,317 2,577 2,592 2,347 2,806 2,353 2,733 2,891 2,923 2,767 3,404 31,698	10,392 12,160 12,844 13,349 11,460 12,976 11,802 12,410 12,676 14,081 11,795 15,707
1975	January February March April May June July August September October AVG. (10 months)	1,615 1,611 1,651 1,604 1,592 1,613 1,616 1,645 1,699 1,716 1,638	1,299 1,097 1,341 1,181 1,100 1,246 1,229 1,272 1,504 1,633 *TOTAL 12,900 (10 months)	655 458 658 506 451 509 557 587 831 682 5,897	1,040 933 1,091 1,071 891 1,022 920 1,122 1,165 1,310 10,557	2,994 2,488 3,090 2,758 2,442 2,777 2,706 2,981 3,500 3,625 29,354	13,189 12,071 15,472 13,545 12,054 13,540 12,545 14,221 15,636 16,689 138,940

^{*}Totals reflect subsequent data revisions and therefore may not agree with cumulative monthly data. Sources: Rotary Rigs - Hughes Tool Company.
Wells - American Petroleum Institute.

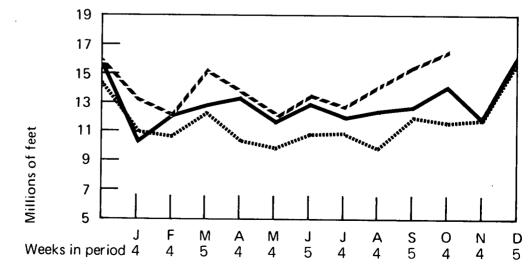
Rotary Rigs in Operation



Total Wells Drilled



Total Footage of Wells Drilled

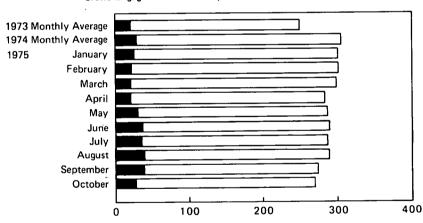


1973 — 1974 — 1975

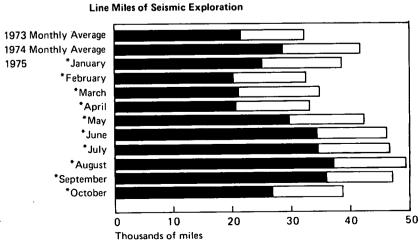
Oil and Gas Exploration (Continued)

	Crews Engag	Crews Engaged in Seismic Exploration		Line Miles of Seismic Exploration		
	Offshore	Onshore	Total	Offshore	Onshore	Total
1972 Monthly Average	12	239	251	10,306	9,333	19,639
1973 Monthly Average	23	227	250	21,579	10,597	32,175
1974 Monthly Average	31	274	305	28,482	13,219	41,701
					Estimates*	
May	35	278	313	32,550	13,677	46,227
June	38	279	317	34,200	13,283	47,483
July	35	299	334	32,550	14,710	47,260
August	34	287	321	31,620	14,120	45,740
September	34	287	321	30,600	13,664	44,264
October	32	288	320	29,760	14,169	43,929
November	30	276	306	27,000	13,140	40,140
December	25	275	300	23,250	13,529	36,779
1975						
January	27	274	301	25,110	13,480	38,590
February	24	278	302	20,160	12,353	32,513
March	23	276	299	21,390	13,578	34,968
April	23	260	283	20,700	12,379	33,079
May	32	254	286	29,760	12,496	42,256
June	38	251	289	34,200	11,950	46,150
July	37	249	286	34,410	12,250	46,660
August	40	249	289	37,200	12,250	49,450
September	40	234	274	36,000	11,141	47,141
October	29	241	270	26,970	11,856	38,826
AVG. (10 months)	31	256	287	28,272	12,351	40,623

Crews Engaged in Seismic Exploration



Offshore
Onshore



*See Explanatory Note 12.

Source: Society of Exploration Geophysicists.

The national average retail price of regular gasoline dropped 0.4 cent in October to 58.9 cents per gallon, the first monthly decline since November 1974. This change reflected price decreases by many of the Nation's largest gasoline marketers. The average price that retailers paid for regular gasoline decreased by the same amount, leaving the dealer margin unchanged at 8.2 cents per gallon.

FEA's monthly survey of 21 of the Nation's largest marketers of gasoline indicated that 17 of them decreased their prices, 1 increased prices, and 3 held prices constant.

HEATING OIL

The national average price of heating oil sold to residential customers during October was 39.3 cents per gallon, up 0.9 cent over the September price.

FEA's monthly survey of 21 of the Nation's largest producers of heating oil indicated that, during October, 14 raised prices, while the others did not change their prices.

CRUDE OIL

During September, the average domestic "new" oil price was \$12.46 per barrel, 8 cents above the August price.

The preliminary estimate for the average cost of domestic crude purchased by refiners during September rose only 0.1 cent per barrel from August to \$8.49.

The preliminary September estimate for the refiner acquisition cost of imported crude was \$14.04 per barrel, 21 cents below the August figure of \$14.25 per barrel. This drop in cost can be attributed to an increase in the percentage of purchases of crude from countries with lower prices.

The preliminary estimate for the composite cost of crude petroleum purchased by refiners during September was \$10.79 per barrel, down 2 cents from the August figure.

NATURAL GAS

In August, the average price of natural gas purchased from domestic producers decreased 1.4 cents per thousand cubic feet while the price from Canadian and Mexican sources increased 39.9 cents per thousand cubic feet. This price rise reflects an additional export fee imposed by the Canadian

Government on August 1. The average selling price for all companies increased 0.7 cent per thousand cubic feet in August.

During October, the average price of natural gas sold to residential customers for heating use advanced 0.6 cent per thousand cubic feet to 156.3 cents.

UTILITY FOSSIL FUELS

The national average cost of fossil fuels delivered to utilities in July was 102.5 cents per million Btu, 3.2 cents above the cost in June. A major portion of this increase can be attributed to a shift in purchases from less expensive coal to more expensive oil. As a result of this shift, the Middle Atlantic region had the largest regional fuel cost increase during the month (14.1 cents per million Btu). The Pacific region, which had fewer oil purchases, showed the greatest regional fuel cost decrease (7.4 cents per million Btu). The rise in the national average fuel cost was also influenced by an increase in utility natural gas costs.

The national average cost of coal delivered to utilities dropped 0.6 cent in July to 80.8 cents per million Btu. Contract and spot coal prices exhibited reductions of 34 cents and \$1.01 per short ton, respectively. The decline in contract prices was due to a reduction in purchases of higher-cost coal from regions where union miners were on contracted vacations during the first 2 weeks of July.

Nationally, residual fuel costs declined for the third consecutive month, to an average of 198.9 cents per million Btu, 1.1 cents below the average for June. The largest decrease (5.4 cents) occurred in the New England region, and the largest increase (18.2 cents) occurred in the Pacific region.

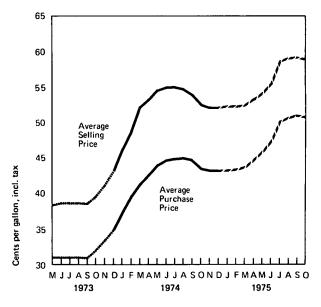
The national average cost of natural gas delivered to utilities advanced 3.5 cents in July to 74.8 cents per million Btu. Two of the largest utility gas consuming regions, the West South Central and the Pacific, reported cost increases of 3.5 and 5.6 cents per million Btu, respectively.

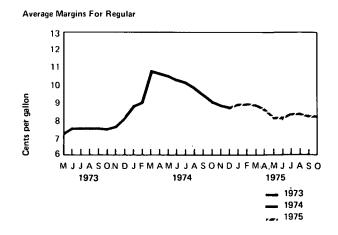
Part 7

Price

Regular Gasoline at Retail Outlets

		Average Selling Price	Average Purchase Price	Average Dealer Margin
		Cents per	gallon, inclu	ding tax*
1973	January February March April May June July August September October November December AVG.	37.3 36.8 37.9 38.3 38.5 38.8 38.8 38.7 39.7 41.3 43.3 39.0	30.5 30.1 30.8 31.0 31.2 31.2 31.2 31.1 32.2 33.6 35.1 31.6	6.8 6.7 7.1 7.3 7.6 7.6 7.6 7.6 7.5 7.7 8.2
1974	January February March April May June July August September October November December AVG.	46.3 48.8 52.3 53.4 54.7 55.1 55.2 54.9 54.2 52.4 52.0 52.0 52.8	37.4 39.7 41.4 42.7 44.1 44.8 45.0 45.1 44.8 43.4 43.2 43.3 43.1	8.9 9.1 10.9 10.7 10.6 10.3 10.2 9.8 9.4 9.0 8.8 8.7
1975	January February March April May June July August September October	52.4 52.5 52.6 53.5 54.3 55.6 58.7 59.2 59.3 58.9	43.4 43.5 43.8 44.9 46.0 47.5 50.3 50.8 51.1 50.7	9.0 9.0 8.8 8.6 8.3 8.1 8.4 8.2





Sources: Platts Oilgram through September 1973. FEA from October 1973 through December 1974. Lundberg Survey, Inc., from January 1975 forward.

^{*}To derive prices excluding taxes, 12.0 cents per gallon may be deducted for 1973 and 12.2 cents per gallon may be deducted for 1974 and 1975.

Average Selling Prices at Major and Independent Retail Outlets - October 1975

	Cents per gallon, including tax
Regular Gasoline	
Major	59.6
Independent	55.2
National Average	58.9
Premium Gasoline	
Major	64.1
Independent	59.1
National Average	63.4
Diesel Fuel*	
Truck Stops	
Major	52.9
Independent	49.7
National Average	51.8
Service Stations	
Major	54.7
Independent	51.7
National Average	53.0

^{*}See Explanatory Note 13. Source: Lundberg Survey, Inc.

Average Margins for Major and Independent Retail Dealers - October 1975

	Cents per gallon
Regular Gasoline	
Major	8.6
Independent	6.4
National Average	8.2
Diesel Fuel*	
Truck Stops	
Major	5.4
Independent	6.3
National Average	6.2
Service Stations	
Major	6.6
Independent	9.0
National Average	7.7

^{*}See Explanatory Note 13. Source: Lundberg Survey, Inc.

Average Regional Retail Selling Prices and Dealer Margins for Regular Gasoline — October 1975

FEA Region	Selling Price	Margin
	Cents per gallon, i	ncluding tax
1A New England	58.4	8.0
1B Mid Atlantic	60.1	7.8
1C Lower Atlantic	_/ 59.2	8.2
2 Mid Continent	/ 58.8	7.7
3 Gulf Coast	56.8	9.4
4 Rocky Mountain	59.1	9.2
5 West Coast	60.0	8.4
National Average	58.9	8.2

Source: Lundberg Survey, Inc.

Motor Gasoline (Continued)

Retail Gasoline Price Changes for Major Oil Companies During October 1975 and Entitlement Position* During September

Company	Effective Date of Change	Amount of Change	Entitlement Position (September)
		Cents per gallon	
Amerada Hess American Petrofina Ashland Atlantic Richfield B.P. Cities Service Champlin Continental Exxon Getty Gulf Kerr-McGee Mobil Phillips	October 16, 29 October 4 October 21, 28 October 24 October 20 October 3 October 3 October 14 October 25 October 23 October 23 October 31 October 25	-1.00, -1.00 -1.50 -1.00 None -1.00 -1.00 -1.00 -1.00 -1.00 -1.00 -1.00 -1.00 -1.00 None	Seller Seller Seller Seller Seller Seller Buyer Buyer Buyer Buyer Seller Buyer Buyer Seller Buyer
Shell Standard Oil of California Standard Oil of Indiana Standard Oil of Ohio Sun Texaco Union Oil of California	October 16 October 17 October 24 October 6 October 23 October 9	-1.00 None -1.00 -1.00 -1.00 -1.00	Buyer Seller Buyer Seller Buyer Buyer Buyer

^{*}See definitions. Source: FEA.

Jobber Prices for Major Brand Regular Gasoline by Marketing Region

		Northeast	Mid- Atlantic	Southeast	Central	Western	Southwest	Pacific	National Average
				Cent	s per gallon	, excluding	tax		
1974	January February March April May June July August September October November December AVG.	21.4 23.7 25.4 26.7 28.5 29.8 29.9 29.7 29.3 28.0 27.8 27.7	21.4 23.6 25.2 26.1 28.4 29.4 29.3 29.4 28.9 27.2 27.3 27.6	21.1 22.5 24.1 24.8 26.8 28.0 28.0 28.6 28.0 26.6 26.6 26.9	21.3 23.9 25.3 26.0 28.2 29.3 29.4 29.6 28.8 27.5 27.5 27.7	22.2 23.5 24.5 25.6 27.7 29.3 28.9 29.1 28.7 27.0 27.5 27.9	20.1 22.5 24.2 24.7 26.3 27.1 27.8 28.1 27.4 26.2 26.3 26.7	21.0 22.6 25.2 25.0 26.3 27.2 28.0 28.6 27.8 26.6 27.3 27.3	21.2 23.2 24.8 25.6 27.5 28.6 28.8 29.0 28.4 27.0 27.2 27.4 26.7
1975	January February March April May June July August September October	27.8 28.4 28.9 29.6 30.9 32.4 34.4 35.3 35.2 34.3	27.8 28.2 28.8 29.9 31.0 32.5 34.6 35.1 35.1 34.6	27.4 27.8 28.4 29.4 30.5 32.0 33.9 34.6 34.5 34.0	28.2 28.7 29.1 30.4 31.6 33.1 34.9 35.6 35.4 34.9	28.5 28.3 29.0 29.8 31.2 32.6 34.5 35.2 35.0 34.3	27.2 27.6 27.8 29.2 30.4 31.6 33.4 34.1 34.1 33.8	27.8 27.5 28.0 29.8 31.0 32.6 33.7 34.5 34.5 34.2	27.8 28.1 28.6 29.7 30.9 32.4 34.2 34.9 34.8 34.3

Source: FEA.

Heating Oil

Retail Heating Oil Price Changes for Major Oil Companies During October 1975

Company	Effective Date	Amount of Change
		Cents per gallon
Amerada Hess American Petrofina Ashland Atlantic Richfield B.P. Cities Service Champlin Continental Exxon Getty Gulf Kerr-McGee Mobil Phillips Shell Standard Oil of California	October 14 October 4 October 17 October 3 October 14 October 15 October 11 October 8 October 16	Cents per gallon 2.00 None None 1.00 2.00 1.00 .25 None 1.00 .50 None None 1.00 1.50 None 1.00 1.50 None 1.00 1.50 None
Standard Oil of Indiana Standard Oil of Ohio Sun Texaco Union Oil of California	October 31 October 4 October 6	2.00 1.50 None .30

Source: FEA.

Residential Heating Oil Prices

		Average Selling Price	Average Purchase Price	Average Dealer Margin
		1	in cents per gall	on
1974	January February March April May June July August September October November December AVG.	31.1 32.8 33.8 34.0 35.1 35.3 35.2 35.8 36.3 35.6 37.9 36.9 34.7	23.4 25.4 25.9 25.9 26.8 27.5 28.1 28.7 28.9 29.1 28.5 26.9	7.7 7.4 7.9 8.1 8.3 7.8 7.1 7.7 7.6 6.7 8.8 8.4
1975	January* February March April May June July August September October	37.4 37.0 36.6 36.1 36.7 36.1 R37.2 38.0 38.4 39.3	29.1 28.7 28.4 29.3 30.0 30.3 R30.6 31.2 31.0 31.8	8.3 8.3 8.2 6.8 6.7 5.8 R6.6 6.8 7.4

R=Revised data. Source: FEA.

Residential Heating Oil Prices by Region

Residen	itial Heating Oil	Prices by Region									I
		New England	Mid Atlantic	Southeast	East North Central	East South Central	West North Central	West South Central	Mountain	West Coast	
					In cents per g	jallon					ng
1974	January February March April May June July August September October November	31.9 33.8 31.9 34.3 34.8 35.9 35.2 36.3 37.2 36.7	31.6 33.5 33.7 34.8 35.6 36.2 35.5 36.1 36.5 35.9 38.7	30.8 32.8 33.9 32.5 36.2 35.8 35.6 37.8 36.1 36.9 37.4	30.3 30.9 34.2 33.5 34.2 34.9 34.4 35.1 35.0 33.3	29.8 32.0 30.6 33.7 34.4 31.1 30.2 33.7 33.6 34.1	31.3 32.9 34.5 30.1 32.6 33.6 34.9 35.2 35.8 33.8	NA NA NA NA NA NA NA NA	30.4 37.2 NA 34.2 34.8 35.9 36.1 NA 32.3 35.6 37.3	30.5 32.8 NA 32.6 37.8 39.1 36.3 35.9 35.1 36.3 36.3	Oil (Continued)
1975	December January February March April May June July August September October	38.3 40.2 39.2 38.0 37.4 37.6 37.7 37.9 38.8 39.4 40.3	38.7 38.9 38.4 37.8 36.8 36.9 37.7 36.9 38.2 38.7 39.9	36.8 36.5 36.8 36.4 36.4 36.4 36.9 37.9 37.6 38.3	34.2 33.4 34.2 33.2 35.1 35.8 36.4 36.3 36.5 37.4	34.7 34.7 33.2 33.7 34.7 NA 34.7 35.7 35.7 36.6	33.5 34.0 33.3 34.3 34.5 35.4 35.9 36.8 36.3 36.8 37.9	N A N A N A N A N A N A N A N A N A	35.8 37.5 36.6 NA 38.9 37.0 37.6 NA 41.3 38.9 39.0	33.9 38.0 37.7 36.8 36.8 37.8 37.6 38.8 39.3 40.1 41.0	

NA=Not available. Source: FEA.

Average Distributor Purchase Prices for Heating Oil by Region

		New England	Mid Atlantic	Southeast	East North Central	East South Central	West North Central	West South Central	Mountain	West Coast
					In cents per g	allon				
1974	January February March April May June July August September October November December January February March April May June July August September October	22.3 24.9 24.9 25.7 26.3 27.5 28.1 29.2 29.9 29.8 29.3 30.3 29.6 29.5 29.4 30.5 30.4 30.7 31.6 31.4 32.0	23.4 25.5 25.0 26.0 27.6 28.2 28.2 28.9 29.4 29.7 29.4 29.7 29.3 29.3 29.5 30.0 30.2 30.1 30.8 30.9 31.9	23.3 25.3 26.3 26.0 27.5 27.8 28.3 27.9 28.5 28.8 28.8 28.4 28.5 28.6 29.1 29.7 30.0 30.6 29.9 30.9 30.7 31.3	23.8 24.8 25.6 27.1 27.3 29.0 27.5 27.5 27.8 27.7 27.8 27.4 27.2 28.1 28.3 30.0 30.5 31.6 31.2 30.6 31.5	23.5 25.2 24.0 26.3 27.4 25.4 25.2 29.3 28.2 28.3 29.1 28.8 28.8 26.8 27.8 28.8 27.8 28.8 26.8 27.8 28.8 28.8 26.8 27.8 28.8 28.8	24.0 26.4 27.0 24.0 25.8 27.4 28.5 28.8 28.4 27.4 27.6 26.7 27.5 27.3 28.1 29.5 29.4 30.7 31.4 30.2 30.6 31.4	NAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	22.5 29.7 NA 26.8 27.1 27.3 28.2 NA 29.3 29.9 27.9 29.3 28.5 29.4 NA 29.0 30.9 31.8 NA 31.6 31.9 34.4	23.0 25.3 NA 26.0 26.2 28.0 29.1 28.2 28.8 29.2 29.8 27.0 29.7 28.5 27.6 28.5 28.5 28.7 29.0 30.4 32.8 31.4 32.5

NA=Not available. Source: FEA.

Crude Oil

Percentage of Domestic Production Sold at Controlled and Uncontrolled Prices

		Controlled	Uncontrolled		
		Old Oil	New Oil	Released	Stripper
1974	January	60	17	10	13
	February	62	15	10	13
	March	60	16	11	13
	April	60	16	11	13
	May	62	15	10	13
	June	63	15	9	13
	July	64	15	9	12
	August	66	14	8	12
	September	67	13	8	12
	October	66	14	8	12
	November	67	13	8	12
	December	66	14	8	12
	AVG.	64	15	9	12
1975	*January	58	19	10	12
	*February	61	17	9	12
	March	60	18	10	12

^{*}Total does not add to 100 due to rounding. Source: FEA.

Domestic Crude Petroleum Prices at the Wellhead

		Old	New
		Dollar	s per barrel
1974	January February March April May June July August September October November December AVG.	5.25 5.25 5.25 5.25 5.25 5.25 5.25 5.25	9.82 9.87 9.88 9.88 9.95 9.95 9.98 10.10 10.74 10.90 11.08 10.13
1975	January February March April May June July August September	5.25 5.25 5.25 5.25 5.25 5.25 5.25 5.25	11.28 11.39 11.47 11.64 11.69 11.73 12.30 12.38 *12.46

Source: FEA.

^{*}Preliminary figure based on early reports.

Refiner Acquisition Cost of Crude Petroleum*

		Domestic	Imported	Composite
			Dollars per barre	el
1974	January February March April May June July August September October	6.72 7.08 7.05 7.21 7.26 7.20 7.19 7.20 7.18 7.26	9.59 12.45 12.73 12.72 13.02 13.06 12.75 12.68 12.53	7.46 8.57 8.68 9.13 9.44 9.45 9.30 9.17 9.13
	November December AVG.	7.46 7.39 7.18	12.53 12.82 12.52	9.41 9.28 9.07
1975	January February March April May June July August September	7.78 8.29 8.38 8.23 8.33 8.33 8.37 8.48 **8.49	12.77 13.05 13.28 13.26 13.27 14.15 14.03 14.25 **14.04	9.48 10.09 9.91 9.83 9.79 10.33 10.57 10.81 **10.79

^{*}See Explanatory Note 14. **Preliminary data.

Source: FEA.

Estimated Landed Cost of Imported Crude Petroleum From Selected Countries*

		Algeria	Canada	Indonesia	Iran	Nigeria	Saudi Arabia	U. A. Emirates	Venezuela
					Dollars	per barrel			
1973	December	NA	6.32	6.42	6.37	8.54	5.49	NA	6.70
1974	January February March April May June July August September October November	NA NA 13.63 14.67 14.43 13.65 13.96 13.83 13.20 13.43	6.70 10.90 11.14 11.02 11.47 12.56 12.65 12.49 12.51 12.53 12.33	NA NA 12.13 12.49 12.95 13.21 13.77 14.38 13.42 14.24 13.45	8.53 12.11 13.02 12.83 13.84 13.44 13.02 12.31 11.87 12.07 12.15	12.13 12.74 13.26 13.67 13.83 13.03 12.75 12.70 12.28 12.12	NA NA 11.59 11.53 11.32 11.97 12.16 11.45 11.51 12.15	NA NA NA NA 13.06 12.34 12.69 NA 12.84 13.54	10.28 11.31 11.78 11.38 11.28 10.39 10.64 11.20 11.01 10.95 11.15
1975	December January *February *March *April *May *June *July *August *September	13.08 12.72 12.11 12.46 12.36 12.41 12.37 12.69 12.68 12.52	12.15 12.43 12.15 12.79 12.95 12.08 11.90 12.15 12.27 12.63	14.15 13.30 13.52 13.94 13.71 13.71 13.73 13.98 13.85 13.75	11.63 12.11 11.86 12.08 12.34 11.93 12.51 11.83 12.17 11.97	12.88 12.07 12.18 12.56 12.46 12.34 12.49 12.37 12.32 12.42	11.75 12.07 11.94 11.78 12.16 12.27 11.93 12.08 12.10 12.17	14.59 13.14 12.67 13.40 12.55 13.29 12.48 12.78 12.60 12.49	11.37 11.37 11.56 11.66 11.61 11.54 11.51 11.46 11.44

Source: FEA.

NA=Not available.
*See Explanatory Note 14.

Natural Gas

Natural Gas Prices Reported by Major Interstate Pipeline Companies

			PURCHASES			SALES	
		From Domestic Producers	From Canadian and Mexican Sources	Total Purchases	To Industrial Users*	To Resellers**	Total Sales
				Cents per thousand cub	ic feet		
1973	December	24.5	47.6	26.3	46.4	52.2	52.3
1974	January February March April May June July August September October November December	24.3 25.4 25.7 25.8 25.7 26.0 26.3 26.1 27.3 27.5 28.5 32.6	42.7 43.2 43.2 46.4 49.3 47.7 58.7 57.5 58.8 58.9 70.9 74.5	25.7 26.8 27.0 27.4 27.5 27.5 28.6 28.4 29.5 29.9 31.7 35.8	48.1 49.8 50.8 49.9 50.8 52.5 55.2 54.7 56.3 58.7 60.3	55.0 56.4 56.9 57.6 58.6 59.4 62.0 64.4 65.2 64.4 66.8 67.2	55.1 56.4 56.9 57.4 57.9 58.5 61.1 63.5 64.3 64.0 66.6
1975	January February March April May June July August	29.8 29.5 31.6 32.9 34.7 35.3 36.9 35.5	104.0 105.8 102.5 102.8 100.6 98.3 101.1 141.0	35.2 35.2 37.0 38.3 39.8 40.2 41.8 43.3	67.6 70.1 70.4 71.1 71.1 72.2 73.9 73.4	71.1 74.1 77.8 82.3 83.7 85.2 84.7 85.6	71.4 74.4 77.9 81.9 82.8 84.0 83.6 84.3

^{*}Represents direct sales by pipelines to industrial users. Does not include sales to industrial users by resellers. **Includes the cost of gas to the distributing utility at entrance of distribution system or point of receipt. Source: Federal Power Commission.

Average Retail Prices for Natural Gas Sold to Residential Customers for Heating Use

		Price
		In cents per thousand cubic feet
1974	January February March April May June July August September October November December	113.3 115.2 116.9 118.2 119.9 120.3 122.0 124.2 125.6 127.4 131.4 134.2
1975	January February March April May June July August September October	137.9 141.3 142.7 147.1 150.1 152.1 151.1 151.8 155.7 156.3

Source: Bureau of Labor Statistics.

Utility Fossil Fuels

COST OF FOSSIL FUELS DELIVERED TO STEAM-ELECTRIC UTILITY PLANTS

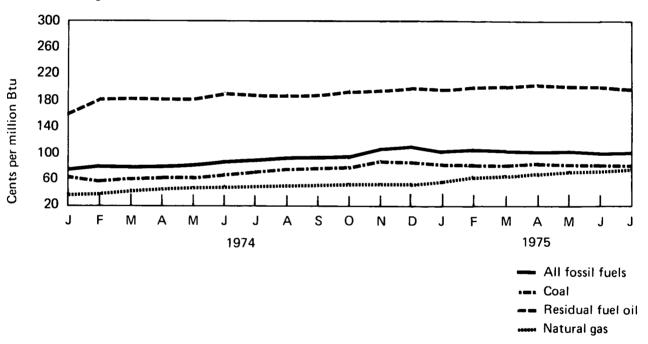
All Fossil Fuels*

Cents per million Btu

	1974						1975						
Region	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
New England Middle Atlantic East North Central West North Central South Atlantic East South Central West South Central West South Central Mountain Pacific	186.2 144.7 79.1 45.3 123.7 65.7 59.4 45.0 118.9	191.4 147.8 82.7 50.3 128.2 68.2 57.1 46.8 118.8	191.6 137.5 82.5 51.0 132.3 69.7 52.1 45.0 127.3	192.6 139.1 84.6 50.0 128.4 75.2 53.7 47.8 132.8	198.7 170.7 102.0 60.0 144.3 86.7 58.0 45.8 157.7	196.6 181.6 100.9 63.3 144.2 86.4 57.5 46.8 191.3	193.6 145.2 86.6 63.5 125.1 79.4 59.8 54.6 190.0	198.8 147.1 85.6 69.0 120.2 83.1 67.4 62.9 194.4	192.2 141.3 86.9 85.5 120.4 83.0 68.9 54.5 196.3	196.3 138.3 86.6 64.5 120.4 83.0 70.0 51.7 209.7	190.5 138.5 87.4 60.3 120.1 84.8 72.9 52.1 187.3	192.7 140.4 87.5 62.8 122.5 85.3 71.2 50.9 154.5	189.5 154.5 89.2 63.0 126.8 86.2 76.0 51.8 147.1
NATIONAL AVERAGE	92.2	95.4	95.9	97.7	111.3	114.7	104.3	106.4	104.2	101.5	101.0	99.3	102.5

^{*}See Explanatory Note 15.

National Average



Coal

Cents per million Btu

1974						1975							
Region	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
New England. Middle Atlantic East North Central West North Central South Atlantic East South Central West South Central Mountain Pacific	106.8 94.3 73.0 44.0 100.4 57.7 17.7 25.0 37.8	93.7 97.4 77.7 48.3 107.5 61.6 17.7 25.1 38.3	93.9 95.2 78.1 50.5 114.5 64.1 17.7 25.1 39.0	110.3 94.6 79.5 48.7 112.6 69.7 21.0 26.7 38.5	108.0 117.4 95.0 57.0 126.8 77.8 21.0 28.3 38.6	93.5 114.4 92.2 56.0 125.8 80.7 21.0 26.4 38.5	113.0 99.1 80.0 56.7 102.3 76.3 21.0 27.9 38.4	134.8 104.7 78.4 57.9 97.0 79.5 21.0 30.6 57.7	126.9 99.7 79.3 59.4 97.4 80.1 21.0 32.0 57.2	135.4 98.2 80.4 60.9 100.8 80.1 21.0 30.3 56.8	125.7 101.7 82.0 57.7 98.8 81.5 21.0 31.1 57.0	116.5 101.6 82.4 58.9 98.4 80.5 21.0 31.0 58.4	119.2 105.5 82.3 60.8 101.6 79.5 24.0 33.1 58.2
NATIONAL	72.9	77.3	79.1	80.9	90.3	88.9	80.9	81.7	80.6	80.5	81.8	81.4	80.8
AVERAGE													
Residual Fuel Oil*													
Cents per million Btu													
		19	74						1975				
Region	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
New England Middle Atlantic East North Central West North Central South Atlantic East South Central West South Central Mountain Pacific NATIONAL AVERAGE Natural Gas	199.2 208.6 182.7 152.7 178.7 169.6 187.5 176.2 204.9	201.8 204.5 164.4 178.1 178.9 172.6 179.3 179.0 220.3 194.6	199.8 200.7 161.5 182.6 179.3 173.9 108.8 186.7 222.3 194.3	202.0 205.4 161.3 179.5 183.3 171.8 186.0 185.0 223.8 198.2	207.5 205.7 167.1 190.7 182.2 167.9 179.7 185.1 219.5	207.5 211.5 164.6 190.6 182.2 172.0 171.7 180.0 233.0 202.1	202.5 202.7 144.9 189.6 180.9 174.0 177.1 192.3 223.6 197.7	204.1 204.1 165.0 182.3 181.6 171.6 178.2 192.4 235.0 202.0	204.3 204.4 163.4 171.5 186.8 163.4 175.8 190.3 241.1 204.8	202.9 203.2 183.1 167.8 188.9 159.7 191.5 206.0 261.1 209.3	200.1 200.1 157.0 163.9 187.7 161.0 177.7 198.0 260.6 205.6	201.7 201.5 168.3 165.5 189.3 165.5 182.0 199.0 245.6 200.0	196.3 200.4 185.2 161.1 185.4 167.8 186.2 209.1 253.8 198.9
Cents per million Btu													
		_	74						1975				
Region	JUL	AUG	SEP	ост	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL 122.1
New England Middle Atlantic East North Central West North Central South Atlantic East South Central West South Central Mountain Pacific NATIONAL AVERAGE	138.7 85.2 77.3 42.1 60.9 63.3 43.8 50.8 60.0 49.8	141.2 74.2 80.5 43.3 58.3 58.9 46.8 49.5 64.0 51.8	132.5 80.5 84.3 43.8 55.8 71.2 46.0 52.1 64.7 52.4	NA 64.8 83.3 43.0 58.5 74.3 47.8 55.7 65.9 53.2	NA 70.0 80.3 44.8 60.2 76.9 51.5 56.6 64.0 54.0	NA 64.3 93.9 42.3 64.7 87.8 52.2 70.7 68.4 55.0	NA 86.1 91.0 43.6 60.3 76.2 55.6 66.9 83.2 58.2	NA 84.5 92.7 43.8 68.5 79.5 63.0 66.7 83.6 65.2	97.1 82.4 93.0 51.5 72.6 82.2 64.5 63.7 80.5 66.4	112.4 101.7 105.5 54.5 70.2 82.7 67.0 67.4 90.1 68.9	110.8 98.3 120.8 58.6 71.2 76.4 71.3 68.1 82.4 72.6	121.7 92.7 111.6 58.1 72.2 77.0 69.2 69.6 84.1 71.3	122.1 91.2 103.4 59.2 68.9 91.0 72.7 71.8 89.7 74.8

NA=Not available.
*See Explanatory Note 15.
**Includes small quantities of coke oven gas, refinery gas, and blast furnace gas.
Source: Federal Power Commission.

Utility Fossil Fuels (Continued)

U.S. Average Delivered Prices of Coal at Utilities

		Contract	Spot			
		In dollars per short to				
1973	January February March April May June July August September October November December	8.09 8.31 8.42 8.43 8.51 8.62 8.44 8.45 8.71 8.86 9.13 9.19	9.91 10.01 10.07 10.44 10.24 10.43 10.40 10.44 10.67 11.24 12.05 13.34			
1974	January February March April May June July August September October November December	9.83 10.40 10.63 11.28 11.80 11.87 12.05 12.50 12.89 13.30 14.16 14.20	17.02 20.57 22.54 23.70 24.21 25.84 27.99 28.87 30.64 30.67 31.95 31.05			
1975	January February March April May June July	14.57 15.71 15.68 15.88 16.45 16.40 16.06	28.12 25.93 25.02 24.52 23.78 23.36 22.35			

PETROLEUM CONSUMPTION

Petroleum consumption figures continue to be difficult to obtain for many countries. particularly the smaller countries. Their failure to report prevents the computation of monthly and year-to-date averages. It is noteworthy, however, that several of the larger industrialized countries have reduced consumption considerably during the past year. During the 12-month period ending August 1975, Japan, the International Energy Agency's second largest consuming nation (United States is first), reduced consumption by 6.5 percent. Consumption by West Germany, the country most frequently compared with the United States, declined 4.7 percent during the same period, while consumption for the United States dropped 1.8 percent.

CRUDE OIL PRODUCTION

World production of crude oil reached a new high of just under 57 million barrels per day in September. Most Arab OPEC countries, in particular Iraq, Kuwait, and Saudi Arabia, showed significant production increases over the August levels, increasing the total by 740,000 barrels per day to 18,45 million. Among the non-Arab OPEC states, Iran reported a production gain of 590,000 barrels per day, which amounted to threefourths of this group's aggregate increase of 770,000 barrels per day. These large production increases are probably due to increased purchases of oil by the consuming countries prior to the anticipated October 1 OPEC price increases. The percentage of production shut in by all OPEC countries dropped from 25.5 to 21.7 during the month.

Part 8

International

Petroleum Consumption

Petroleum Consumption for Major Free World Industrialized Countries

		Total IEA*	Japan	West Germany	France**	United Kingdom	Canada	Italy***	Other IEA+	
			In thousands of barrels per day							
1973	Jan	35,100	4,121	2,868	2,743	2,315	1,667	1,781	3,681	
	Feb	36,800	4,532	2,850	2,687	2,313	1,747	1,866	4,551	
	Mar	33,500	4,450	2,707	2,528	2,271	1,584	1,710	3,585	
	Apr	31,000	4,008	2,809	2,296	2,038	1,431	1,420	3,371	
	May	30,900	3,822	2,546	1,890	1,939	1,486	1,285	3,219	
	Jun	30,600	3,950	2,674	1,685	1,697	1,474	1,255	3,079	
	July	29,600	3,783	2,196	1,566	1,637	1,490	1,303	2,855	
	Aug	31,600	3,790	2,738	1,495	1,615	1,557	1,255	3,232	
	Sept	31,000	3,813	2,618	1,932	1,727	1,427	1,462	3,333	
	Oct	33,600	4,212	2,969	2,482	2,150	1,680	1,610	3,777	
	Nov	35,200	4,562	2,883	2,593	2,258	1,801	1,551	3,653	
	Dec	33,700	4,716	2,481	2,768	1,906	1,828	1,698	3,533	
	AVG.	R32,692	R4,144	R2,693	R2,219	R1,974	R1,597	R1,525	R3,482	
1974	Jan	33,200	4,273	2,556	2,523	2,045	1,823	1,755	3,478	
	Feb	33,200	4,708	1,969	2,389	2,127	1,863	1,751	3,411	
	Mar	31,200	4,508	2,173	2,249	2,133	1,658	1,621	3,062	
	Apr	30,200	3,804	2,539	1,970	1,899	1,560	1,396	3,083	
	May	29,600	3,718	2,403	1,915	1,704	1,572	1,349	3,134	
	Jun	29,600	3,710	2,414	2,103	1,545	1,455	1,290	3,010	
	July	29,900	3,573	2,548	1,703	1,531	1,534	1,368	3,045	
	Aug	30,100	3,787	2,476	1,506	1,513	1,463	1,237	3,078	
	Sept	30,600	3,868	2,473	1,996	1,663	1,414	1,487	3,701	
	Oct	32,300	3,843	2,613	2,045	2,049	1,680	1,536	3,554	
	Nov	32,700	4,086	2,432	2,260	2,108	1,713	1,587	3,559	
	Dec	33,900	4,401	2,261	2,492	1,983	1,831	1,707	3,720	
	AVG.	R31,367	R4,019	R2,408	R2,094	R1,857	R1,630	R1,521	R3,318	
1975	Jan	32,900	3,850	2,183	2,185	1,993	1,691	1,725	3,475	
	Feb	33,000	4,242	2,455	2,238	1,913	1,870	1,737	3,535	
	Mar	30,300	3,978	2,234	1,948	1,773	1,548	1,482	2,969	
	Apr	30,200	3,463	2,431	2,202	1,872	1,606	1,403	3,384	
	May	NA	3,304	2,253	1,640	1,488	1.522	1,171	NA	
	Jun	NA	3,323	2,106	1,643	1,404	1,512	1,194	NA	
	July	NA	R3,420	2,319	R1,484	1,324	NA	1,135	NA	
	Aug	NA	R3,541	2,360	1,336	1,200	NA	1,021	NA	
	Sept	NA	NA	NA	1,746	NA	NA	NA	NA	
	AVG.		3,634	2,291	1,820	1,617	1,621	1,354	3,336	
	(throu									
	last av									
	able da	ate)								

able date)

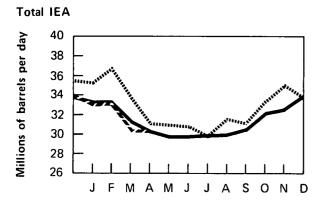
Source: Central Intelligence Agency.

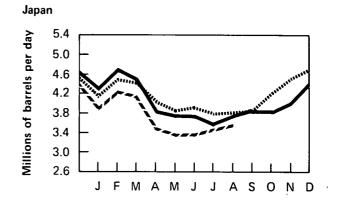
^{*}The 18 signatory nations of the International Energy Agency (IEA) are: Austria, Belgium, Canada, Denmark, Federal Republic of Germany, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States. Except for the United States, inland consumption excludes bunkers, refinery fuel, and losses.
***Not a member of IEA.

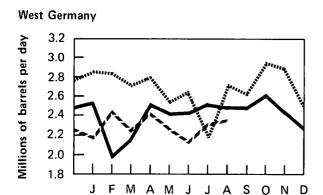
^{***}Principal products only.

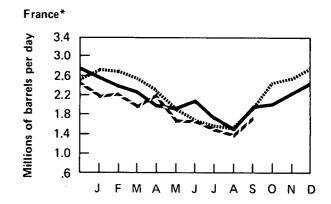
⁺Excludes the United States.

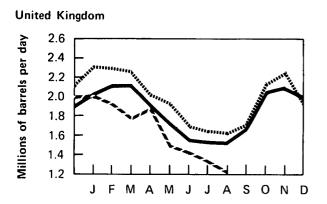
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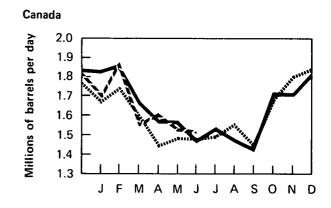


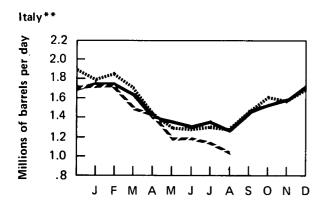


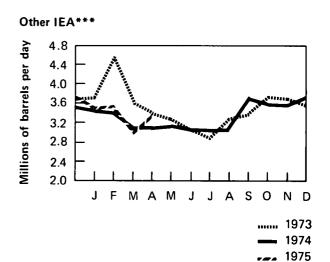












Crude Oil Production

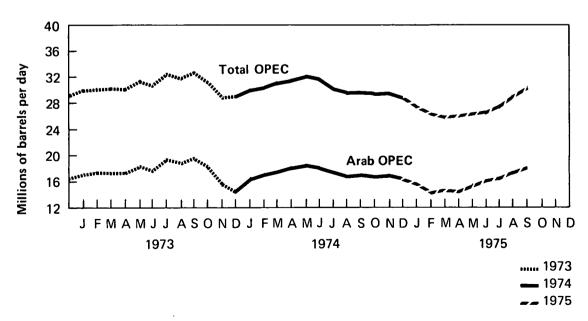
Crude Oil Production for Major Petroleum Exporting Countries - September 1975

Country		Pro	duction		Production Capacity	Production Shut in
	1973	1974	1975	September	September	September
			(9 months)			
		In percent				
Algeria	1,070	940	920	900	1,000	10.0
Iraq	1,964	1,820	2,258	2,500	3,000	16.6
Kuwait*	3,024	2,550	2,174	2,700	3,500	22.9
Libya	2,187	1,520	1,433	1,790	2,500	28.4
Qatar	570	520	402	280	700	60.0
Saudi Arabia*	7,607	8,480	7,170	8,419	11,500	26.9
United Arab Emirates	1,518	1,680	1,642	1,870	2,340	20.1
Subtotal: Arab OPEC	17,940	17,510	15,010	18,450	24,540	24.8
Ecuador	204	160	159	190	250	24.0
Gabon	147	180	209	200	250	20.0
Indonesia	1,339	1,380	1,280	1,390	1,700	18.2
Iran	5,861	6,040	5,513	6,100	6,800	10.3
Nigeria	2,053	2,260	1,730	1,920	2,500	23.2
Venezuela	3,364	2,970	2,457	2,320	3,000	22.6
Subtotal: Non-Arab						
OPEC	12,968	12,990	11,348	12,120	14,500	16.4
Total: OPEC	30,908	30,500	26,338	30,570	39,040	21.7
Canada	1,798	1,695	1,451	1,540	**2,016	23.6
Mexico	465	580	689	R750	**840	10.7
Total: OPEC, Canada,						
Mexico	33,171	32,775	R23,498	R32,860	41,896	21.6
Total World	55,715	55,855	R53,267	R56,970		

^{*}Includes about one-half of Neutral Zone production which amounted to approximately 530,000 barrels per day in September.

Source: Central Intelligence Agency.

OPEC Countries Crude Oil Production



^{**}August figures.

Definitions

Base Production Control Level

The total number of barrels of domestic crude petroleum produced from a particular property in the corresponding month of 1972.

Branded Independent Marketer

A firm which is engaged in the marketing or distribution of refined petroleum products pursuant to (1) an agreement or contract with a refiner (or a firm which controls, is controlled by, or is under common control with such refiner) to use a trademark, trade name, service mark, or other identifying symbol or name owned by such refiner (or any such firm), or (2) an agreement or contract under which any such firm engaged in the marketing or distribution of refined petroleum products is granted authority to occupy premises owned, leased, or in any way controlled by a refiner (or firm which controls, is controlled by, or is under common control with such refiner), but which is not affiliated with, controlled by, or under common control with any refiner (other than by means of a supply contract, or an agreement or contract described in parts (1) or (2) of this definition). and which does not control such refiner.

Ceiling Price

The maximum permissible selling price for a particular grade of domestic crude petroleum in a particular field is the May 15, 1973, posted price plus \$1.35 per barrel.

Controlled Crude Oil

Domestically produced crude petroleum that is subject to the ceiling price for crude oil. For a particular property which is not a stripper-well lease, the volume of controlled oil equals the base production control level minus an amount of released oil equal to the new oil production from that property.

Crude Oil Domestic Production

The volume of crude oil flowing out of the ground. Domestic production is measured at the wellhead and includes lease condensate, which is a natural gas liquid recovered from lease separators or field facilities.

Crude Oil Imports

The monthly volume of crude oil imported which is reported by receiving refineries, including crude oil entering the U.S. through pipelines from Canada.

Crude Oil Input to Refineries

Total crude oil used as input for the refining process, less crude oil lost or used for refinery fuel.

Crude Oil Stocks

Stocks held at refineries and at pipeline terminals. Does not include stocks held on leases (storage facilities adjacent to the wells), which historically total approximately 13 million barrels.

Dealer Tankwagon (DTW) Price

The price at which a retail dealer purchases gasoline from a distributor or a jobber.

Distillate Fuel Oil

The lighter fuel oils distilled off during the refining process. Included are products known as ASTM grades Nos. 1 and 2 heating oils, diesel fuels, and No. 4 fuel oil. The major uses of distillate fuel oils include heating, fuel for on- and off-highway diesel engines, and railroad diesel fuel. Minor quantities of distillate fuel oils produced and/or held as stocks at natural gas processing plants are not included in this series.

Domestic Demand for Refined Petroleum Products

A calculated value, computed as domestic production plus net imports (imports less exports), less the net increase in primary stocks. It, therefore, represents the total disappearance of refined products from primary supplies.

Domestic Uncontrolled Crude Oil

That portion of domestic crude oil production including new, released, and stripper oil which may be sold at a price exceeding the ceiling price.

Electricity Production

Production at electric utilities only. Does not include industrial electricity generation.

Entitlement Position

The monthly "entitlement" position of a refiner indicates whether he bought or sold entitlements in that month. An entitlement is the right to purchase "old" oil. A refiner must purchase entitlements for the amount of "old" oil he processes in excess of the national "old" oil supply ratio, defined as total "old" oil purchases by refiners as a percent of total crude runs to stills.

Firm Natural Gas Service

High priority gas service in which the pipeline company is under contract to deliver a specified volume of gas to the customer on a non-interruptible basis. Residential and small commercial facilities usually fall into this category.

Interruptible Natural Gas Service

Low priority gas service in which the pipeline company has the contractual option to temporarily terminate deliveries to customers by reason of claim of firm service customers or higher priority users. Large commercial facilities, industrial users, and electric utilities usually fall into this category.

Jet Fuel

Includes both naphtha-type and kerosine-type fuels meeting standards for use in aircraft turbine engines. Although most jet fuel is used in aircraft, some is used for other purposes, such as for generating electricity in gas turbines.

Jobber

A petroleum distributor who purchases refined product from a refiner or terminal operator for the purpose of reselling to retail outlets and commercial accounts or for the purpose of retailing through his own retail outlets.

Jobber Margin

The difference between the price at which a jobber purchases refined product from a refiner or terminal operator and the price at which the jobber sells to retail outlets. This does not reflect margins obtained by jobbers through retail sales or commercial accounts.

Jobber Price

The price at which a petroleum jobber purchases refined product from a refiner or terminal operator.

Landed Cost

The cost of imported crude oil equal to actual cost of crude at point or origin plus transportation cost to the United States.

Line Miles of Seismic Exploration

The distance along the earth's surface that is covered by seismic traverses.

Major Brand

Major brand, as used in this publication, refers to an integrated company that produces, refines, transports, and markets in Interstate Commerce under its own brand(s) in 20 or more States.

Motor Gasoline Production

Total production of motor gasoline by refineries, measured at refinery outlet. Relatively small quantities of motor gasoline are produced at natural gas processing plants, but these quantities are not included.

Motor Gasoline Stocks

Primary motor gasoline stocks held by gasoline producers. Stocks at natural gas processing plants are not included.

Natural Gas Liquids (NGL)

Products obtained from natural gasoline plants, cycling plants, and fractionators after processing the natural gas.

Included are ethane, liquefied petroleum (LP) gases (propane, butane, and propane-butane mixtures), natural gasoline, plant condensate, and minor quantities of finished products such as gasoline, special naphthas, jet fuel, kerosine, and distillate fuel oil.

New Oil

The volume of domestic crude petroleum produced from a property in a specific month which exceeds the base production control level for that property.

Nonbranded Independent Marketer

A firm which is engaged in the marketing or distribution of refined petroleum products, but which (1) is not a refiner, (2) is not a firm which controls, is controlled by, is under common control with, or is affiliated with a refiner (other than by means of a supply contract), and (3) is not a branded independent marketer.

Old Oil

Same as controlled crude oil.

Power Ascension Nuclear Powerplant

A nuclear powerplant that has been licensed by the Nuclear Regulatory Commission to operate, but which is in the initial testing phase during which production of electricity may not be continuous. In general, when the electric utility is satisfied with the plant's performance, it formally accepts the plant from the manufacturer, and places it in "commercial operation" status. A request is then submitted to the appropriate utility rate commission to include the powerplant in the rate base calculation.

Primary Stocks of Refined Petroleum Products

Stocks held at refineries, bulk terminals, and pipelines. They do not include stocks held in secondary storage facilities, such as those held by jobbers, dealers, independent marketers, and consumers.

Refiner Acquisition Cost

The cost to the refiner, including transportation and fees, of crude petroleum. The composite cost is the average of domestic and imported crude costs and represents the amount of crude cost which refiners may pass on to their customers.

Released Oil

That portion of the base production control level for a property which is equal to the volume of new oil produced in that month and which may be sold above the ceiling price. The amount of released oil may not exceed the base production control level for that property.

Residual Fuel Oil

The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are boiled off in refinery oper-

ations. Included are products known as ASTM grades Nos. 5 and 6 oil, heavy diesel oil, Navy Special Oil, Bunker C oil, and acid sludge and pitch used as refiner fuels. Residual fuel oil is used for the production of electric power, for heating, and for various industrial purposes.

Rotary Rig

Machine used for drilling wells that employs a rotating tube attached to a bit for boring holes through rock.

Separative Work Unit (SWU)

The measure of work required to produce enriched uranium from natural uranium. Enrichment plants separate natural uranium feed material into two groups, an enriched product group with a higher percentage of U-235 than the feed material and a depleted tails group with a lower percentage of U-235 than the feed material. To produce 1 kilogram of enriched uranium containing 2.8 percent U-235, and a depleted tails assay containing 0.3 percent U-235, it requires 6 kilograms of natural uranium feed and 3 kilograms of separative work units (3 SWU).

Stripper Well Lease

A property of which the average daily production of crude petroleum and petroleum condensates, including natural gas liquids, per well did not exceed 10 barrels per day during the preceding calendar year.

Synthetic Natural Gas (SNG)

A product resulting from the manufacture, conversion, or reforming of petroleum hydrocarbons which may be easily substituted for or interchanged with pipeline quality natural gas.

Total Refined Petroleum Products Imports

Imports of motor gasoline, naphtha-type jet fuel, kerosine-type jet fuel, liquefied petroleum gases, kerosine, distillate fuel oil, residual fuel oil, petro-chemical feedstocks, special naphthas, lubricants, waxes, and asphalt. Imports of bonded bunkers, jet fuel, distillate and residual fuel oils for onshore military use, and receipts from Puerto Rico, the Virgin Islands, and Guam are based on data reported to the FEA Office of Oil Imports.

Well

Hole drilled for the purpose of finding or producing crude oil or natural gas or providing services related to the production of crude oil or natural gas. Wells are classified as oil wells, gas wells, dry holes, stratigraphic tests, or service wells. This is a standard definition of the American Petroleum Institute.

Explanatory Notes

- 1. Domestic production of energy includes production of crude oil and lease condensate, natural gas (wet), and coal (anthracite, bituminous, and lignite), as well as electricity output from hydroelectric and nuclear power-plants and industrial hydroelectric power production. The volumetric data were converted to approximate heat contents (Btu-values) of the various energy sources using conversion factors listed in the Units of Measure.
- 2. Domestic consumption of energy includes domestic demand for refined petroleum products, consumption of coal (anthracite, bituminous, and lignite) and natural gas (dry), electricity output from hydroelectric and nuclear powerplants, industrial hydroelectric power production, and imports of electric power. Approximate heat contents (Btu-values) were derived using conversion factors listed in the Units of Measure. Electricity imports were converted using the Btu-content of hydroelectric power. 1975 electricity imports were estimated on the basis of imports levels during 1974.
- 3. Graphic presentations of petroleum volumetric data show Bureau of Mines (BOM) figures for 1973 through July 1975 and FEA figures for August 1975 forward. FEA monthly data for May 1974 through March 1975 were based on the Weekly Petroleum Statistics Report which presented volumetric data on domestic petroleum receipts and imports for all refiners and bulk terminal operators, as well as production and stock levels for each major petroleum product. In April 1975, the FEA weekly report was replaced by the Monthly Petroleum Statistics Report which presents essentially the same data on a monthly basis.

Conceptually, the major difference between FEA and BOM data occurs in the "Stocks" series. Stock levels reported by FEA for the major petroleum products are higher than those reported by BOM, because the FEA series includes stocks of independent terminal operators not counted by BOM. Beginning in December 1974, however, BOM data reflect the inclusion of approximately 100 additional bulk terminals in the coverage of primary stocks, bringing the data base for the 2 series into closer agreement.

In the current issue, cumulative 1972, 1973, and 1974 petroleum data presented in the text are based on BOM figures. Discussions of cumulative 1975 data are based on BOM figures for January through July and FEA figures for August forward.

4. Oil heating degree-days relate demand for distillate heating fuel to outdoor air temperature. Heating degree-days are defined as deviations of the mean daily temperature.

ature at a sampling station below a base temperature equal to 65° F by convention. Numerous studies have shown that when the outside temperature is 65°, most buildings can maintain an indoor air temperature of 70° without the use of heating fuels.

Mean daily temperature information is forwarded to the National Oceanic and Atmospheric Administration, Department of Commerce, from approximately 200 weather stations around the country. These data are used to calculate statewide heating degree-day averages based on population. The population-weighted State figures are aggregated into Petroleum Administration for Defense Districts and the national average, using a weighting scheme based on each State's consumption of distillate fuel oil per degree-day (1974 data base).

- 5. Domestic demand figures for natural gas liquids (NGL) as reported by BOM and reproduced in this publication do not include amounts utilized by refineries for blending purposes in the production of finished products, principally gasoline. Use of NGL at refineries is reported in a separate column. The production series cited in this publication shows both NGL produced at processing plants and liquefied gases produced at refineries. NGL produced at refineries is extracted from crude oil and hence, to avoid double counting, should not be included in calculations of total U.S. production of petroleum liquids. The NGL stock series shown in this volume includes liquids held as stocks at both natural gas processing plants and at refineries.
- 6. Domestic consumption of natural gas includes the quantities sold to consumers plus the gas used for plant and pipeline fuel, after the natural gas liquids have been extracted. All monthly consumption data are estimated.

Marketed production of natural gas includes gross withdrawals from the ground less the quantities used for repressuring and the amount vented and flared, before the natural gas liquids have been extracted.

- 7. Bituminous coal and lignite consumption data reported by the Bureau of Mines are derived from information provided by the Federal Power Commission, Department of Commerce, and reports from selected manufacturing industries and retailers. Domestic consumption data in this series, therefore, approximate actual consumption. This is in contrast to domestic demand reported for petroleum products, which is a calculated value representing total disappearance from primary supplies.
- 8. Bituminous coal and lignite production is calculated from the number of railroad cars loaded at mines, based on the assumption that approximately 60 percent of the coal produced is transported by rail. Production data are

estimated by the Bureau of Mines from Association of American Railroads reports of carloadings.

9. Quantities of uranium are measured by various units at different stages in the fuel cycle. At the mill, quantities are usually expressed as pounds or short tons of $U_3\,O_8$. After the conversion stage, the units of measure are either metric tons (MT) of UF₆ or metric tons of uranium (MTU). The latter designation expresses only the elemental uranium content of UF₆.

Following the enrichment stage, the same units are used, but the U-235 content has been enhanced at the expense of loss of material. At the fabrication stage, UF₆ is changed to UO₂, and the standard unit of measure is the MTU. We have chosen to present all uranium quantities as MTU; conversion factors to other units are given in the section on Units of Measure.

10. The units used to describe power generation at nuclear plants are all based on the watt, which is a unit of power. (Power is energy produced per unit of time.) As with fossil-fueled plants, nuclear plants have three design power ratings. The thermal rating (expressed in thermal megawatts) is the rate of heat production by the reactor core. The gross electrical rating (expressed in electrical megawatts, MWe) is the generator capacity at the stated thermal rating of the plant. The net electrical rating (also expressed in MWe) is the power available as input to the electrical grid after subtracting the power needed to operate the plant. (A typical nuclear plant needs 5 percent of its generated electricity for its own operation.)

The electrical energy produced by a plant is expressed either as megawatt hours (MWhe) or kilowatt hours (KWhe). Tables in the nuclear section show generated electricity as average electrical power. This enables a more direct comparison to design capacity and to previous months' performances. To obtain the quantity of electricity generated during a given time period (in megawatt hours), multiply the average power level (in megawatts) by the number of hours during that period.

The energy extracted from uranium fuel is expressed as thermal megawatt days per metric ton of uranium (MWD/MTU). The production of plutonium in the fuel rods is expressed as kilograms of plutonium per metric ton of discharged uranium (kg/MTU).

11. The Residential and Commercial Sector consists of housing units, non-manufacturing business establishments (e.g., wholesale and retail businesses), health and educational institutions, and government office buildings. The Industrial Sector is made up of construction, manufacturing, agriculture, and mining establishments. The Transportation Sector consists of both private and public passenger and freight transportation, as well as

government transportation, including military operations. The Electric Utilities Sector is made up of privately- and publicly-owned establishments which generate electricity primarily for resale.

- 12. Monthly mileage estimates for 1974 and 1975 are based on the average number of miles traversed per crew day in 1974.
- 13. Prior to January 1975, diesel fuel prices were obtained from retail gasoline dealers that also sold diesel fuel. Beginning in January 1975, the diesel fuel survey was expanded to include selected truck stops plus additional retail gasoline dealers that sold diesel fuel. Consequently, diesel fuel prices for January 1975 forward are not exactly comparable to prior data. Selling price estimates are based on a survey of 31 cities. Margins are based on a survey of 10 cities.
- 14. The refiner acquisition cost of imported crude petroleum is the average landed cost of imported crude petroleum to the refiner and represents the amount which may be passed on to the consumer. It incorporates transportation costs and fees (including the supplemental import fees) and any other costs incurred in purchasing and shipping crude oil to the United States.

The estimated landed cost of imported crude petroleum from selected countries does not represent the total cost of all imported crude. Prior to March 1975, imported crude costs to U.S. company-owned refineries in the Carribbean were not included in the landed cost, and costs of crude petroleum from countries which export only small amounts to the United States were also excluded. Beginning in March 1975, however, coverage was expanded to include U.S. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.

15. The weighted average utility fuel cost for the total United States includes distillate fuel oil delivered to utilities whereas the regional breakdown for residual fuel oil prices represents only No. 6 fuel oil prices.

Units of Measure

Weight

1 metric ton contains 1.102 short tons

Conversion Factors for Crude Oil

Average gravity

1 barrel (42 weighs 0.136 metric tons gallons) (0.150 short tons)

1 metric ton contains 7.33 barrels

1 short ton contains 6.65 barrels

Conversion Factors for Uranium

1 short ton (U₃O₈) contains 0.769 metric tons of uranium 1 short ton (UF₆) contains 0.613 metric tons of uranium 1 metric ton (UF₆) contains 0.676 metric tons of uranium

Approximate Heat Content of Various Fuels

Petroleum

Crude Oil 5.800 million Btu/barrel Refined products

6.000 million Btu/barrel Imports, average 5.517 million Btu/barrel Consumption, average 5.248 million Btu/barrel Gasoline Jet Fuel, average 5.592 million Btu/barrel 5.355 million Btu/barrel Naphtha-type 5.670 million Btu/barrel Kerosine-type 5.825 million Btu/barrel Distillate fuel oil 6.287 million Btu/barrel Residual fuel oil

Natural gas liquids 4.031 million Btu/barrel

Natural gas

Wet 1,093 Btu/cubic foot
Dry 1,021 Btu/cubic foot

Coal

Bituminous and lignite

Production 24.01 million Btu/short ton Consumption 23.65 million Btu/short ton Anthracite 25.40 million Btu/short ton

Electricity Conversion Heat Rates

Fossil fuel steam-electric

Coal 10,176 Btu/kilowatt hour Gas 10,733 Btu/kilowatt hour Oil 10,826 Btu/kilowatt hour Nuclear steam-electric 10,660 Btu/kilowatt hour Hydroelectric 10,389 Btu/kilowatt hour Electricity Consumption 3,412 Btu/kilowatt hour







FEA/B-75/670

Federal Energy Administration Monthly Energy Review